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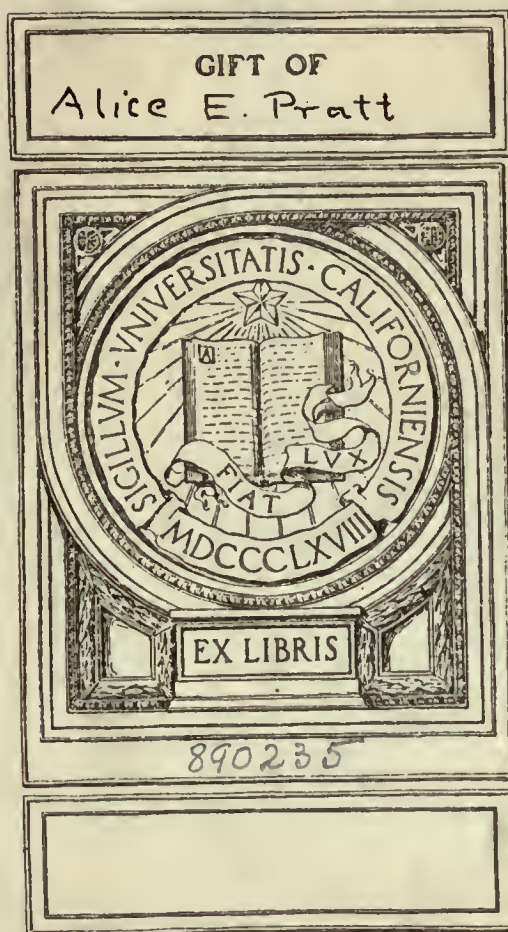
CORNELL'S

GRAMMAR-SCHOOL

GEOGRAPHY

NEW YORK: APPLETON AND SONS

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1869



This copy, formerly the property of Professor Edward Rowland Sill, is interesting for the pencil sketch by him on the end blank leaf. - J.C. Rowell.

ERB

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REVISED EDITION.

CORNELL'S
GRAMMAR-SCHOOL
GEOGRAPHY:

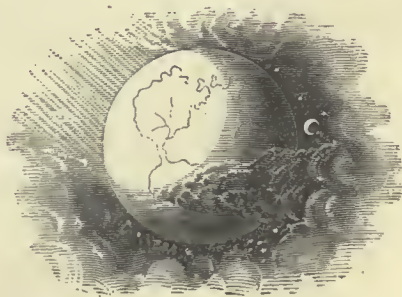
FORMING A PART
OF A
SYSTEMATIC SERIES OF SCHOOL GEOGRAPHIES.

EMBRACING AN EXTENDED COURSE, AND ADAPTED TO

PUPILS OF THE HIGHER CLASSES IN PUBLIC AND PRIVATE SCHOOLS.

BY S. S. CORNELL,

CORRESPONDING MEMBER OF THE AMERICAN GEOGRAPHICAL AND STATISTICAL SOCIETY.



NEW YORK:

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1869.

PREFACE.

THE work now offered to the public has been prepared to meet the wants of such classes in Geography as need a comprehensive course, embracing the less prominent as well as the more important localities on the earth's surface, and exercising the student in every profitable variety of map studies. It may, with advantage, be placed in the hands of classes that have completed the author's Intermediate Geography; or, where the saving of time is an object, it may be used instead of the latter work, as the second Part of the Series.

The chief difference between the Intermediate and Grammar-School is that the latter, though no more elevated in style, is fuller in both map and descriptive matter, presenting a greater number of localities to be memorized. The original plan of the author, which is now so well understood and so generally appreciated as here to require no argument in its favor, has been strictly adhered to in the present work; which, it is hoped, will be found philosophical in its arrangement, accurate in its details, and every way adapted to the school-room.

Among the more important features of this work are the following:—

First, it contains a comprehensive treatise on Physical Geography.

Second, it presents fully and systematically the Physical Geography of the United States grouped together in sections, as represented in the Reference Maps, with descriptions of their most important and interesting natural features.

Third, it suggests an easy method for memorizing the comparative size of all the countries on the earth.

Fourth, it embraces two sets of Maps of the United States and Europe: the one containing a careful selection of places, etc., all of which the pupil is obliged thoroughly to master, by means of systematic lessons; the other (intended for reference) being as full as is consistent with distinctness, and accompanied by general questions which embody an original, and, it is believed, highly instructive, series of map exercises.

Fifth, all map questions are placed opposite the maps to which they respectively belong.

Sixth, the pronunciation of names likely to be mistaken is given in the place where they first occur.

Seventh, it contains a simple and practicable system of Map Drawing, which will aid in impressing on the mind of the learner the outlines of countries and the relative position of places.

In the present edition, the text has been thoroughly revised and brought up to date. A complete set of New Maps has been introduced, which, we think, leave nothing to be desired even by the most fastidious and critical. In fine, the Author has earnestly endeavored to make this Revised Edition in every respect worthy of the favor which the work has from the very first enjoyed at the hands of an intelligent public.

NEW YORK, *May 1*, 1868.

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CORNELL'S

GRAMMAR-SCHOOL GEOGRAPHY.

LESSON I.

Mathematical Geography.

Geography is the science that describes the surface of the earth.

Division of the Subject.—Geography is divided into three branches :—Mathematical, Physical, and Political.

MATHEMATICAL GEOGRAPHY treats of the form, magnitude, and motions of the earth, and of the various imaginary lines on its surface.

PHYSICAL GEOGRAPHY treats of the solid and fluid parts of the earth's surface, the atmosphere, and all animal and vegetable life.

POLITICAL GEOGRAPHY treats of the various countries on the earth's surface, their people, customs, religion, and government.

The Form of the Earth is nearly that of a globe, or sphere.

Proofs of the Spherical Form of the Earth.—1st. The highest part of a ship is seen first in the distance, and, as she approaches, the lower part, or hull.

2d. Persons have sailed constantly in one direction, either east or west (as nearly as the different bodies of land would permit), and returned to the place from which they set out.

3d. The shadow the earth casts on the moon, during a lunar eclipse, is circular.

Extent of the Earth's Surface.—The earth's surface contains about 200,000,000 square miles.

The Earth's Axis is an imaginary straight line passing through its center, around which it turns.

The Poles of the Earth are the ends of the earth's axis, or the points where the axis meets the surface.

THE NORTH POLE is the north end of the earth's axis.

THE SOUTH POLE is the south end of the earth's axis.

REMARK.—The North Pole, or most northerly point of the earth's surface, is always directed toward a particular star, called the North or Pole Star.

Motions of the Earth.—The earth has two motions :—a diurnal, or daily motion, on its axis ; and an annual, or yearly motion, round the sun.

THE EARTH TURNS ON ITS AXIS from west to east, once in every twenty-four hours.

This revolution causes the succession of day and night.

THE EARTH REVOLVES ROUND THE SUN in a nearly circular course, called its **Orbit**, in about $365\frac{1}{4}$ days.

This revolution causes, in part, the diversity of the seasons.

The Earth's Annual Motion is about 68,000 miles an hour.

The Distance of the Earth from the Sun is about 95,000,000 miles.

The Length of the Earth's Orbit is about 600,000,000 miles.

LESSON II.

Mathematical Geography—Continued.

The Compass is used for ascertaining and directing the course of ships at sea, for surveying land, etc. It is a circular box, containing a card marked with the points of direction and attached to a magnetic needle, which moves freely on a pivot, and always points due north, or nearly so.

The Cardinal Points of the Compass are North, South, East, and West.

Cardinal means *chief* ; the cardinal points are the chief points of direction.

The other Important Points are North-east, South-east, North-west, and South-west.



THE MARINER'S COMPASS.

REMARK.—Observe in what part of the heavens the sun rises,—that is east ; or where it sets,—that is west. Now, if you will stand with outstretched arms, so that the right hand points to that part of the heavens in which the sun rises, and the left to that part where it sets, before you will be north, and behind you south. Again,—look at the sun at noonday, and you will then face the south. If at night, when the stars are visible, you will look at the Pole Star, you will then face the north.

The Circles of the Earth.—The surface of the earth is divided by imaginary circles. There are two kinds of circles ; viz., great and small.

A **GREAT CIRCLE** divides the earth into two equal parts.

A **SMALL CIRCLE** divides the earth into two unequal parts.

Circles, how divided.—Every circle, whether great or small, is divided into 360 equal parts, called **Degrees**.

A **DEGREE** is the three-hundred-and-sixtieth part of a circle.

The sixtieth part of a degree is called a Minute, and the sixtieth part of a minute is called a Second.

The mark for degrees is ($^{\circ}$), for minutes ($'$), and for seconds ($''$). Thus, twenty-three degrees, twenty-seven minutes, and thirty seconds, is usually written, $23^{\circ} 27' 30''$.



west. If this is not the case, the direction of these points is shown by a cross on the map, having a flower called *fleur de lis* at the end that points to the north.

Point to the north; to the south; to the east; to the west. In what direction does the building you are in, face?

LESSON III.

Mathematical Geography—Continued.

The Lines, or Circles, on Maps, are the equator, meridians, parallels, tropics, and polar circles.

These lines help us to determine the relative positions of places, and their distances from each other.

THE EQUATOR is a great circle equally distant from the two poles.

A MERIDIAN CIRCLE is any great circle passing through the two poles.

A MERIDIAN is half of a meridian circle.

The word *meridian* means mid-day, or noon. When the sun is directly over

a meridian, it is noon at all places through which that meridian passes.

REMARK.—There is but one equator on the earth, but every point on its surface has its own meridian.

A Hemisphere is half of a sphere.

Hemispheres of the Earth.—The equator divides the earth into two hemispheres, Northern and Southern.

Every meridian circle divides the earth into two hemispheres, Eastern and Western. The circle selected by geographers so to divide the earth, is 20 degrees west of Greenwich, a place very near London.

The Circumference of the Earth is the distance round it.

The circumference of the earth is greatest at the equator, measuring about 25,000 miles.

The Diameter of the Earth is the distance through its center.

THE LONGEST, OR EQUATORIAL, DIAMETER of the earth extends from any point on the equator to the opposite point.

THE SHORTEST, OR POLAR, DIAMETER of the earth extends from one pole to the other.

The length of the equatorial diameter is about 7,925 miles; that of the polar diameter, about 7,899 miles.

REMARK.—The poles are about 13 miles nearer than the equator to the center of the earth.

LESSON IV.

Mathematical Geography—Continued.

Longitude is distance, either east or west, from some given meridian, which is called the First Meridian.

THE MERIDIAN OF GREENWICH is most frequently used as the first meridian.

In the United States, longitude is sometimes computed from the meridian of Washington, and in France from that of Paris. Washington is 77° west of the meridian of Greenwich.

Kinds of Longitude.—There are two kinds of longitude, east and west. A place is in East Longitude, when it is situated east of the first meridian; in West Longitude, when it is west of the first meridian.

The greatest longitude a place can have, is 180 degrees, either east or west.

Longitude of a Place.—The distance, measured in degrees on the equator, between the meridian of any place and the first meridian, is called the Longitude of that place.

Places on the first meridian have no longitude.

Longitude, where marked on Maps.—On the map of the hemispheres, the degrees of longitude are marked on the equator; on other maps, they are at the top and the bottom. The meridian of Greenwich is marked with a cipher (0).

Degrees of Longitude.—The equator is divided into 360 equal parts, called degrees,—each containing 60 geographic miles. As these divisions together mark out the length of the equator, they are called degrees of longitude, or length.

LENGTH OF A DEGREE OF LONGITUDE.—As the earth is about 25,000 miles in circumference, it follows that each degree of longitude at the equator contains about $69\frac{1}{4}$ statute miles; but north or south from the equator, a degree becomes shorter and shorter, till at the poles it is nothing. The length of a degree of longitude, in latitude 60° , is only 30 geographic miles.

Latitude is distance either north or south from the equator.

PARALLELS OF LATITUDE are small circles parallel to the equator.

Kinds of Latitude.—There are two kinds of latitude, north and south.

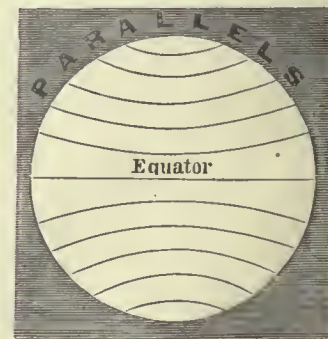
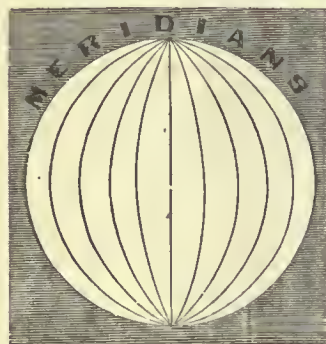
A place is in North Latitude, when it is situated north of the equator; in South Latitude, when it is south of the equator.

The greatest latitude a place can have is 90 degrees.

Latitude of a Place.—The distance of a place from the equator, measured in degrees, is called the Latitude of that place.

Places on the equator have no latitude.

Latitude, where marked on Maps.—The figures denoting latitude are on the sides of the maps.



Degrees of Latitude.—The distance between the poles, measured on a meridian, is divided into 180 equal parts, called degrees (90 degrees being north, and 90 degrees south, of the equator). As these divisions together mark out the breadth of the earth, measured on each side from the equator, they are called degrees of latitude, or breadth.

LENGTH OF A DEGREE OF LATITUDE.—The length of each degree of latitude is $69\frac{1}{4}$ statute, or 60 geographic, miles.

LESSON V.

Mathematical Geography—Continued.

The Tropics are two small circles parallel to the equator, called the Tropic of Cancer and the Tropic of Capricorn.

THE TROPIC OF CANCER is $23\frac{1}{2}$ degrees north of the equator.

THE TROPIC OF CAPRICORN is $23\frac{1}{2}$ degrees south of the equator.

The Polar Circles are two small circles parallel to the equator, called the Arctic and the Antarctic Circle.

THE ARCTIC CIRCLE is $23\frac{1}{2}$ degrees from the north pole.

THE ANTARCTIC CIRCLE is $23\frac{1}{2}$ degrees from the south pole.

Zones.—Zones are belts, or divisions, of the earth, bounded by the tropics and the polar circles. The word *zone* means a belt, or girdle.

The tropics and polar circles divide the earth's surface into five zones. The portion between the tropics is called the Torrid Zone.

The portions bounded by the polar circles are called Frigid Zones, the one being the North Frigid, and the other the South Frigid Zone.

The two intermediate portions, situated between the torrid zone and the frigid zones, are called respectively the North Temperate and the South Temperate Zone.

The Torrid Zone.—In this zone are the hottest parts of the earth. It has two seasons—the wet and the dry.

From October to April the dry season prevails in the northern half of the torrid zone, and the wet season in the southern half. From April to October this order is reversed.—The breadth of the torrid zone is 47 degrees,— $23\frac{1}{2}$ degrees on each side of the equator.

DAYS AND NIGHTS IN THE TORRID ZONE.—The days and nights in the torrid zone are nearly of equal length,—about 12 hours each.

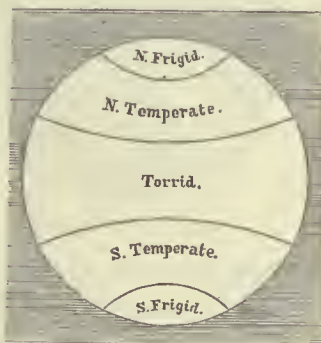
The Frigid Zones are the coldest parts of the earth. They have but two seasons; viz., a long, cold winter, and a short summer. While it is summer in the north frigid zone, it is winter in the south frigid.

The frigid zones are $23\frac{1}{2}$ degrees each in breadth.

DAYS AND NIGHTS IN THE FRIGID ZONES.—The days and nights in the frigid zones are very unequal in length. At the polar circles the longest day is 24 hours, but at the poles the days and nights are each six months long. The days and nights between these two points vary much in length.

The Temperate Zones.—The temperate zones have a medium climate. They have four seasons—Spring, Summer, Autumn, and Winter.

While it is spring in the north temperate zone, it is autumn in the south temperate; and when it is summer in the north temperate, it is



winter in the south temperate.—The temperate zones are 43 degrees each in breadth.

DAYS AND NIGHTS IN THE TEMPERATE ZONES.—These are of unequal length. In summer the days are more, and the nights less, than 12 hours in length, while in winter this order is reversed.

Kinds of Climate.—The five zones represent three distinct kinds of climate; viz., the coldest, the hottest, and the medium or temperate.

LESSON VI.

Physical Geography.

Physical Geography treats of the solid and fluid parts of the earth's surface, the atmosphere, and all animal and vegetable life.

The Earth's Surface is composed of land and water; about one-fourth, or 50,000,000 square miles, being land, and three-fourths, or 150,000,000 square miles, being water.

The Land, how naturally divided.—The land is divided into parts of different form, known as continent, island, peninsula, isthmus, cape, promontory, mountain, hill, plain, and valley. These are called the Natural Divisions of Land.

Continent is the name applied to the three largest natural divisions of land.

RULE FOR DESCRIBING A CONTINENT.—Tell which hemisphere it is in, and what bodies of water surround it.

Example.—The Western Continent is in the Western Hemisphere, and is surrounded by the Arctic, the Atlantic, the Southern, and the Pacific Ocean.

An Island is a body of land surrounded by water, like a continent, only not so large.

RULE FOR DESCRIBING AN ISLAND.—Tell its direction from the nearest coast, and what bodies of water surround it.

Example.—Newfoundland (*nu'-fund-land*) is east of continental British America, and is surrounded by the Strait of Belle Isle, the Atlantic Ocean, and the Gulf of St. Lawrence.

A Peninsula is a portion of land extending from some larger body, and nearly surrounded by water.

RULE FOR DESCRIBING A PENINSULA.—Tell its direction from the main-land, and what bodies of water nearly surround it.

Example.—South America is south-east of North America, and is nearly surrounded by the Caribbean Sea, the Atlantic Ocean, the Strait of Magellan, and the Pacific Ocean.

An Isthmus is a narrow strip which connects a peninsula with the main-land.

RULE FOR DESCRIBING AN ISTHMUS.—Tell what bodies of water it lies between, and what countries it connects.

Example.—The Isthmus of Suez (*soo'-ez*) lies between the Mediterranean and the Red Sea, and connects Africa with Asia.

A Cape is a point of land which projects into the water. **A Promontory** is an elevated point of land which projects into the water.

RULE FOR DESCRIBING A CAPE OR PROMONTORY.—Tell from what coast, and into what body of water, it projects.

Example.—Cape St. Roque (*roke*) projects from the eastern coast of Brazil, into the Atlantic Ocean.

A Mountain is a very large mass of earth and rock, considerably elevated above the surrounding country.

RULE FOR DESCRIBING A MOUNTAIN.—State the part of the country, and the country, in which it is situated.

Example.—Mount Etna is in the north-eastern part of the Island of Sicily.

A Range.—Many mountains joined are called a Range, or Chain.

RULE FOR DESCRIBING A RANGE.—Tell in what country or countries it is situated, and in what direction it extends.

Example.—The Rocky Mountain Range is in British America and the United States, extending in a north-westerly and south-easterly direction.

A Volcano is a mountain with an opening in the top, or side, from which issue at times fire and smoke. The opening in the top is called its Crater.—**A Hill** is a portion of land higher than the surrounding country, but not so high as a mountain.—**A Shore, or Coast**, is the strip of land which borders upon any body of water.—**A Plain** is a level tract of land.—**A Valley** is a tract of land inclosed between hills or mountains.

The Water, how naturally divided.—The water is divided into parts, variously formed, known as ocean, sea, gulf, bay, strait, passage, sound, channel, lake, and river. These are called the Natural Divisions of Water.

Ocean is the name applied to the largest natural division of water.

REMARK.—As there can be but *one* largest natural division of water on the earth, it follows that there is, strictly speaking, but one ocean. For convenience of description, however, the Ocean is divided into five parts, each designated by a particular name; the Arctic or Northern, the Antarctic or Southern, the Atlantic, the Pacific, and the Indian.

RULE FOR DESCRIBING AN OCEAN.—Tell its direction from the coasts it washes.

Example.—The Atlantic Ocean is east of America, and west of Europe and Africa.

A Sea is a branch of some larger body of water, partly inclosed by land.

RULE FOR DESCRIBING A SEA.—Tell its direction from the coast or coasts it washes, and then of what body of water it is a branch.

Example.—The Red Sea is west of Asia, and east of Africa. It is a branch of the Indian Ocean.

REMARK.—There are bodies of water called seas which are really lakes, such as the Caspian, the Dead, and the Sea of Aral (*ar'al*); these should be described as lakes.

A Frih, or Estuary, is a narrow arm of the sea, into which a river empties. An Archipelago is a sea interspersed with many isles. A group of islands is also sometimes called an Archipelago.

A Gulf, or Bay, is a branch of some large division of water, extending into the land. Describe a gulf, or bay, like a sea.

A Strait is a narrow passage connecting two larger bodies of water.

RULE FOR DESCRIBING A STRAIT.—State between what countries it lies, and what bodies of water it connects.

Example.—The Strait of Gibraltar lies between Spain and Morocco, and connects the Mediterranean Sea with the Atlantic Ocean.

A Sound is a narrow body of water sufficiently shallow to be sounded; that is, to have its depth ascertained by a lead and line.

A Channel is a narrow arm of the sea, which generally performs the office of a strait.—If a sound or a channel performs the office of a strait, describe it as such; if not, follow the rule for describing a gulf, or bay.

A Lake is a body of water formed by streams or springs, which is almost, and sometimes *quite*, encircled by land.

RULE FOR DESCRIBING A LAKE.—State the part of the country, and the country in which it is situated, and then what stream, if any, serves as its outlet.

Example.—Great Slave Lake is in the northern part of British America, and Mackenzie's River is its outlet.

REMARK.—Streams which empty into a lake are called Inlets, and those which flow from a lake are called Outlets.

A River is a stream flowing in an open channel through the land.

RULE FOR DESCRIBING A RIVER.—Tell where it rises, in what direction it flows, and into what body of water it empties.

Example.—The Mississippi River rises in the northern part of Minnesota, in Itasca Lake, takes a southerly course, and empties into the Gulf of Mexico.

REMARK.—The Source, or Head, of a river, is the spring or body of water from which it begins to flow. The Mouth of a river is that part through which it discharges its waters into some other body of water. Rivers that flow into other rivers are called Branches, Affluents, or Tributaries. Small rivers are called Creeks, Brooks, Rivulets, or Rills.

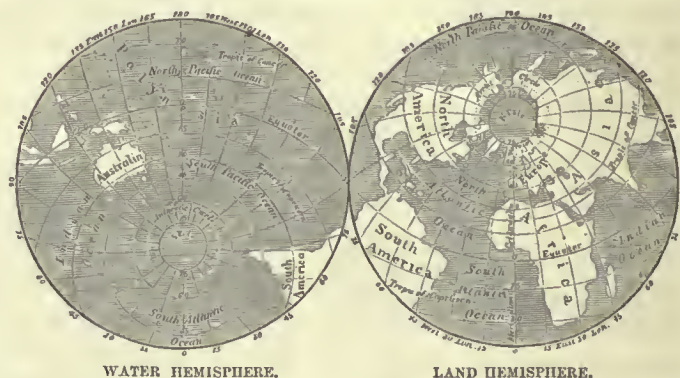
LESSON VII.

Physical Geography—Continued.

Interior of the Earth.—It is supposed that the interior of the earth is in a state of intense heat, and that the surface is a comparatively thin crust, formed by the cooling down of the melted mass within.

The greatest depth reached by man is one mile from the surface; and, at distances where the heat of the sun ceases to be felt, the temperature is found to increase 1 degree for every 60 feet of depth. If this rate is maintained, the heat at a depth of 21 miles would be sufficient to melt the most refractory substances.

General Distribution of Land and Water.—There is about three times as much land in the Northern Hemisphere as in the Southern; and two and a half times as much in the Eastern Hemisphere as in the Western. The earth may be so divided as to throw still more of the land in one hemisphere, as will be seen from the following Map:—



The Continents.—There are three vast and detached portions of land on the globe, which are properly called Continents. These are, the Old World, or the Eastern Continent, consisting of Europe, Asia, and Africa; the New World, or the Western Continent, embracing North and South America; and Australia, which, with the adjacent islands, Polynesia, and Malaysia, constitutes the Grand Division known as Oceania. There is also what is called the Antarctic Continent, ice-bound and unexplored, the northern coast of which extends somewhat north of the Antarctic Circle.

Form of the Continents.—While the coast-line of the Eastern and the Western Continent is quite irregular, it is to be observed that their general form is triangular. Their northern coasts are broad flats, while on the south they narrow down to sharp and elevated points.

It will also be remarked that the peninsulas of both the Eastern and the Western Continent have a southerly direction; the chief exceptions being Yucatan in North America, and Denmark in Europe.

Rank of the Grand Divisions.—In size, Asia ranks first; Africa, second; North America, third; South America, fourth; Oceania, fifth; and Europe, sixth. In population, Asia ranks first; Europe, second; Africa, third; North America, fourth; Oceania, fifth; and South America, sixth.

LESSON VIII.

Physical Geography—Continued.

Diversity of Elevation.—By referring to the Map of the World (pages 14, 15), it will be seen that the land surface of the earth is greatly diversified by mountains, table-lands or plateaus, low-lands, plains, and valleys.

Mountains.—Elevations exceeding 1,000 feet are called Mountains. Mountains are generally arranged in groups or chains. Several connected chains are called a System.

Direction of Mountain Chains.—Nearly all the mountain chains of the Western Continent extend in the general direction of north and south. The chief exceptions are found in the Parime (*pah-re'ma*) and Acaray (*ah-kah-ri'*) Mountains of Northern South America, and a few minor ranges that cross the plateau of Brazil.

In the Eastern Continent the chief mountain chains run east and west, the Mountains of the Moon in Africa forming the chief exception.



Slopes of Mountain Chains.—Most mountain chains have a more gradual slope on one side than on the other. The gentler slopes of the principal chains are toward the Atlantic and the Arctic Ocean, while their steeper slopes are, for the most part, toward the Pacific and the Indian.

Thus, in America, the Rocky Mountains and the Andes have their more gradual slope on the eastern side; the Mountains of the Moon, in Africa, on the western—all toward the Atlantic. The Alps and the



FORMS OF MOUNTAINS.

Pyrenees of Europe, and the Himala'ya Mountains of Asia, slope more gradually toward the north (that is, in the direction of the Arctic Ocean), than in the opposite direction.

The Highest Mountains.—The highest mountain range in the world is the Himalaya. Its mean elevation is estimated at from 16,000 to 20,000 feet. Forty of its peaks exceed 20,000 feet in height.

The loftiest mountain in N. America is Mount St. Elias,	17,900 ft.
" " " " S. " " Mt. Aconcagua (<i>ah-kon-kah'-gwah</i>),	23,910 "
" " " " Europe " Mt. Elburz (<i>el-boorz'</i>),	18,493 "
" " " " Asia " Mt. Everest,	29,100 "
" " " " Africa " Mt. Kilimanjaro (<i>kil-e-mahn-jah-ro'</i>),	20,000 "
" " " " Oceania " Mt. O'phir (Sumatra),	13,842 "

Elevations, comparatively considered.—Though mountains appear to be enormous elevations on the earth's surface, they are inconsiderable when compared with the whole mass of the globe. The loftiest peak, which is less than five and a half miles high, is only about one fifteen-hundredth part of the earth's diameter.

Utility of Mountains.—Mountains are of great use to man. They attract the clouds and store up in reservoirs the water received from them, sending it forth again in streams, from thousands of springs, to fertilize the soil. They increase the surface of the earth, giving variety to its vegetable productions; and they are the great storehouses of mineral treasures.

Volcanoes.—Volcanoes may be regarded as the great safety-valves of the globe, giving vent to the gases generated by the heat within. Some eject boiling mud, instead of lava, and are called Mud Volcanoes; others emit water, and are called Water Volcanoes. It is supposed that there are about 300 volcanoes on the earth, 200 of which are on islands.

Volcanoes are either continuously active, occasionally active, or extinct. Stromboli (*strom'bo-le*), on one of the Lipari (*lip'ah-re*) Isles, is an example of a continuously active volcano. It is rarely violent, but emits a constant light, and serves as a light-house to the mariner in that part of the Mediterranean. Eruptions are much more frequent in low than in lofty volcanoes.



CRATER OF VESUVIUS.

Earthquakes.—Earthquakes are convulsions of the earth, most common in volcanic districts. They frequently precede volcanic eruptions, and are sometimes so violent as to destroy whole cities. A Chart beneath the Map of the World, page 14, shows the regions most frequently visited by earthquakes.

LESSON IX.

Physical Geography—Continued.

Table-Lands, or Plateaus.—Table-lands are extensive tracts considerably elevated above the level of the sea.

A series of table-lands extends along the eastern base of the Rocky Mountains, from 2,000 to 3,000 feet in height. The table-lands of Utah, between the Rocky Mountains and the Sierra Nevada, (*navah'dä*) have twice that elevation. The immense plateau of Mexico and Central America exceeds 6,000 feet in height.

In South America are found some of the highest table-lands on the globe. The plateau of Quito (*ke'to*), lying on both sides of the equator, is 9,000 feet in elevation; that of Pasco (*pahs'ko*), upward of 11,000; and that of Potosi (*po-to'-se*), from 12,000 to 13,000.

The table-lands of Europe are comparatively small. The southwest portion of the Scandinavian Peninsula (Norway and Sweden) con-

stitutes a plateau of moderate elevation. Bavaria is a table-land of about 2,000 feet in height; and the central part of the Spanish Peninsula consists chiefly of a plateau from 2,000 to 3,000 feet above sea-level.

Asia contains the most extensive and elevated table-lands on the globe. The whole of Central Asia is one vast plateau of 3,000,000 square miles, varying in height from 4,000 to 12,000 feet above sea-level. Separated from this immense plateau by the basin of the Ganges, are the table-lands of Hindostan', with an elevation of 2,000 feet; and in South-western Asia is another plateau from 2,000 to 4,000 feet in height.

The greater part of Central Africa is supposed to be an enormous plateau, with a mean height of about 8,000 feet. The Desert of Sahara (*sah-hah'-rah*) constitutes an immense table-land of small elevation.

In Australia, two plateaus, one on the southern and the other on the northern coast, spread out to unknown distances in the interior.

Lowland Plains.—Lowland Plains are tracts of land, either having about the same level as the ocean, or depressed below it, as in the regions around the Caspian Sea. The Dead Sea and the adjacent region have a depression of more than 1,300 feet below sea-level. The plains of the Western Continent exceed in extent those of the Eastern.

Deserts.—Deserts are barren tracts of land, nearly destitute of water and vegetation. In some desert regions are interspersed small fertile tracts, well watered and wooded. These are called Oases.

The most extensive deserts are to be found in the Eastern Continent. Of these, the most important are the Desert of Gobi (*go'be*) or Shamo (*shah'mo*), and the Arabian Desert, in Asia,—and the Sahara, or Great Desert, of Africa.

Islands.—Islands are variously distributed, occurring singly, or in groups and archipelagoes. It is supposed that they are the tops of mountains or table-lands, whose base is in the bed of the ocean, and whose valleys and passes are filled with its waters. Islands form about one-twelfth of the earth's surface.

Some islands extend along the coasts of continents, of which they are supposed to be dependencies. Others have been thrown up from the bed of the ocean by volcanic action. A third class, called Coral Islands, have been formed by myriads of minute insects, inhabiting the waters of the Torrid Zone and the warmest parts of the North and South Temperate.



CORAL ISLAND, INCLOSING A LAGOON.

These little creatures, extracting lime from the sea-water, build for their habitations great masses of coral, forming reefs hundreds of miles in extent, and circular islands, or Atolls. As they can not live above the surface of the ocean, they raise their structure only to low-water mark. Sand, sea-weed, and seeds, are brought to it by currents, and in process of time it becomes the abode of man.

The Bahamas, in the Atlantic Ocean, and many of the islands of the Pacific and Indian, are of coral formation.

LESSON X.

Physical Geography—Continued.

The Waters of the Globe—how divided.—As respects position, the waters of the globe may be divided into two classes; *land-inclosed*, or *continental* waters, and *land-inclosing*, or *oceanic* waters.

As respects properties, they may be divided into three classes; *salt*, *mineral*, and *fresh*. Oceanic waters are salt; continental waters are, for the most part, fresh.

Springs.—Springs are formed from melted snow, dew, and rain, which, falling on high elevations of land, sink into the soil. The cavities beneath the surface form reservoirs, from which, at a lower level, the water finds its way again to the surface.

Those springs which continue to flow at all seasons, are called *perennial*; those that alternately flow and stop, are called *intermitting*.

There are also Hot Springs. The water, descending from the surface to a considerable depth, becomes heated by volcanic action. Steam is generated; which, if unable to escape, by its elastic force drives the water up through crevices in the rocks.

The most remarkable hot springs known are those of Iceland, called Geysers (*ghi'zers*). One hundred of these occur within a circuit of two miles, one of which, the Great Geyser, every few hours, sends forth an immense stream of boiling water to a height of from 70 to 100 feet.

Rivers.—Rivers which empty directly into the ocean, or into waters communicating with it, are called Oceanic Rivers. Those which never reach the ocean, but fall into lakes unconnected with it, or are absorbed and lost in swamps or deserts, are called Continental Rivers.

The oceanic rivers are divided into four systems, belonging respectively to the Arctic, the Atlantic, the Pacific, and the Indian Ocean.

Sources of Rivers.—Most of the large rivers originate in chains of mountains, because springs are there most abundant; but in some instances they have their source in small elevations in plains.

Descent and Rapidity of Rivers.—Water, like every other fluid, when left free, seeks the lowest possible level; hence the course of a river shows the general slope of the country through which it flows.

The velocity of the current depends on both the volume of water and the declivity of the channel. A fall of one foot in two hundred feet prevents a river from being navigable. In general, winding rivers are less rapid than those whose channel is straight.

Rapids, Cataracts, Cascades.—When the fall of a river is sudden, and its velocity extremely great, it forms what is called a Rapid; and when it rushes over a perpendicular rock, it is called a Cataract, or Water-fall. When a small stream dashes over a rock, it is called a Cascade.

River-basins.—The entire extent of country drained by a river and its tributaries, is called its Basin.

The largest rivers and the most extensive river-basins are found in the Western Continent. The basin of the Amazon, in South America, embraces over 2,000,000 square miles; that of the La Plata (*lah*

plah'tah) in South America, 1,240,000 square miles; and that of the Mississippi, about an equal number.

Water-sheds.—The margin of land which separates one river-basin from another is called a Water-shed. This, in some cases, is a mere ridge-line, like the top of a roof, from which the waters flow in opposite directions.

Months of Rivers, Deltas.—Rivers discharge themselves usually by a single mouth, but in some instances by several mouths.

Some rivers carry down with them large quantities of earthy matter, which, as their velocity decreases when they approach the sea, are deposited, forming triangular banks called Deltas (from the Greek letter *delta* Δ, which they resemble in shape).

The Ocean.—The Ocean forms one vast body of water. The great land-masses, however, are so placed as to divide it into three principal basins, called respectively the Atlantic, Pacific, and Indian Ocean.

The Arctic Ocean may be regarded as an extension of the Atlantic, the Arctic Circle forming the boundary line between them. The Antarctic Ocean, which has the Antarctic Circle for its northern limit, is connected with each of the three great ocean basins.

The ocean has everywhere a uniform surface, which is called the Level of the Sea. Some of its branches have a higher level, in consequence of prevailing winds, peculiarity of position, etc.

LESSON XI.

Physical Geography—Continued.

Saltiness, Color, Density, and Temperature of the Ocean.—The waters of the ocean are salt, and bluish green in color, but both the degree of saltiness and the tint differ in different places. Its density increases from the surface downward.

The mean temperature of the surface of the ocean, for 10° on each side of the equator, is about 80° Fahrenheit; at the tropics, it is about 75°; in latitude 60°, it is about 50°; and in the Arctic and the Antarctic Ocean, it falls to the freezing point.

Depth.—The bed of the ocean contains a variety of hills, tablelands, and valleys, similar to the elevations and depressions of the land surface. The greatest ascertained depth of the ocean is about 8½ miles.

Movements of the Ocean.—There are three distinct movements of the ocean; waves, tides, and currents.

Waves.—The action of the winds on the surface of the ocean produces waves, varying in height from a mere ripple to billows of from 10 to 20 feet.

Tides.—Tides are elevations and depressions of the ocean which occur at regular intervals. They are caused chiefly by the attraction of the sun and moon.

The waters of the ocean gradually rise or *flow*, as it is called, about six hours; after remaining stationary about six minutes, they then retire, or *ebb*, during another six hours, to flow again after a brief repose. In the open ocean the tide seldom rises more than a few feet, probably never exceeding five. The highest tides occur in the Bay of Fundy, where, with certain winds, owing to the peculiar formation of the shore, they attain a height of 70 feet.

Co-tidal Lines.—The wave of high water, which twice a day visits the shores of the different continents, is supposed to have its origin in

the Southern Ocean, south-east of Australia. It is thence carried forward into the Indian, the Atlantic, and the Pacific Ocean.

By noting the times at which the same high water reaches different parts of the coast, a series of lines connecting these points may be laid down, so as to indicate the course of the tidal wave. These are called Co-tidal Lines. By examining these lines on the Map of the World, it will be perceived that the tidal wave that passes Tasmania at twelve o'clock, takes twelve hours to reach Ceylon, and thirteen to arrive at the Cape of Good Hope; in twelve hours more, it has passed up the Atlantic as far as Newfoundland.

Currents.—The ocean is crossed in different directions by currents (see Map of the World) flowing like rivers, the neighboring waters forming, as it were, their banks. There are three prominent causes that produce these currents; the unequal heating of the surface of the ocean, the earth's daily motion, and the obstruction of continents.

Ocean currents are of the greatest importance to navigators, accelerating or retarding the course of ships according to the direction in which they are sailing.

The Gulf Stream.—The most remarkable of these currents is the Gulf Stream. It is distinguished by its superior warmth, its indigo hue, and its rapidity of movement.

It issues from the Gulf of Mexico (see Map of the World) between the Bahamas and Florida, and flows in a north-easterly direction as far as Cape Hatteras. There it separates, one portion setting east toward the Azores, and another following the coast of North America to Newfoundland. At the Azores, a part of the Gulf Stream turns to the south-west, and after running along the African coast joins the great equatorial current, which sets westward across the Atlantic.

The highest temperature of the Gulf Stream is 86°. Its velocity is over a mile and a half an hour. The mild climate of the British Isles is attributable principally to the warmth of the Gulf Stream, which washes their shores.

Seas.—With the ocean various seas communicate, either by straits, like the Baltic and the Mediterranean; or by wide openings, like the Yellow Sea and the Arabian. Seas of the former class are called *inland*, and those of the latter may be styled *open*.

Besides these two classes of *oceanic seas*, there are other bodies of water, not connected with the ocean, such as the Caspian and the Sea of Aral, which, though called seas, are really salt lakes.

The Atmosphere.—The earth is surrounded by a highly elastic fluid, called its Atmosphere, which extends about fifty miles above its surface. The color of the atmosphere is light blue; what we call "the blue sky" is nothing more than the blue air.

The atmosphere is essential to animal and vegetable life, diffusing the light and heat of the sun and other luminous bodies in all directions.

Density of the Atmosphere.—The density of the atmosphere gradually diminishes, as we ascend above the level of the sea. A perpendicular column of the whole atmosphere presses on the earth's surface with a weight of about fifteen pounds on every square inch.

The air on the top of lofty mountains is so rare as to affect the breathing, prostrate the strength, and make sounds much fainter than they would be at the level of the sea.

Temperature of the Atmosphere.—The temperature of the atmosphere becomes lower with its height. Hence the perpetual snow that crowns lofty summits. The mercury in the thermometer falls one degree for every 300 feet of ascent.

LESSON XII.

Physical Geography—Continued.

Winds.—Wind is air in motion.—Winds are called after the point of the compass from which they come; marine currents, after the point to which they tend. An easterly wind comes from the east; an easterly current, from the west.

Velocity of Winds.—Winds vary much in their velocity and force. A gentle wind has a velocity of from 4 to 5 miles an hour; a brisk wind, from 10 to 15; a high wind, from 30 to 35; a violent storm, 60; a hurricane, 80; a violent hurricane, 100.

Use of Winds.—Winds have a purifying effect on the atmosphere; they dissipate unhealthy exhalations; they waft our ships; they transport vapors from the sea, to moisten and fertilize the land; they carry the seeds of plants far and wide, and thus extend the empire of vegetation.

Trade Winds.—These winds prevail generally in the Atlantic and the Pacific, between the equator and the 28th degree of north and south latitude. The heat between the tropics being greater than on the other parts of the earth's surface, the incumbent air, becoming warmer and consequently less dense, rises, and the vacant place is immediately occupied by colder and therefore heavier air, which rushes in on both sides from the regions beyond the tropics.

Monsoons.—Monsoons are regular periodical winds which sweep over the Indian Ocean and Hindostan, changing their course according to the position of the sun. When the sun is north of the equator, the south-west monsoon prevails; when south, the north-west monsoon.

Hurricanes.—Hurricanes are violent revolving storms, from a few miles to 500 miles in diameter, which occur most frequently in the West Indies and the Indian Ocean. In the Chinese Sea, they are called *typhoons* or *tornadoes*; in other places, they are known as *whirlwinds*, *waterspouts*, *landspouts*, *sand-pillars*, *white-squalls*, *pamperos*, etc.

Rain.—Rain is water, which, originally taken up into the atmosphere in the form of vapor, is returned to the earth in drops. The average quantity of rain is greatest within the tropics.

Rainy Seasons.—Countries situated within 10° of the equator have two rainy and two dry seasons during the year; but, beyond that degree, tropical regions have only one rainy and one dry season, the former lasting from four to six months. During this period, the rain commences about noon, and generally continues four or five hours, after which the clouds vanish, and not a drop falls during the night. In some parts of the earth, however, within and near the tropics, rain never falls, and there are other regions where it rains almost incessantly.

Snow.—Snow is vapor congealed and crystallized before its particles have had time to join together to form a rain-drop.

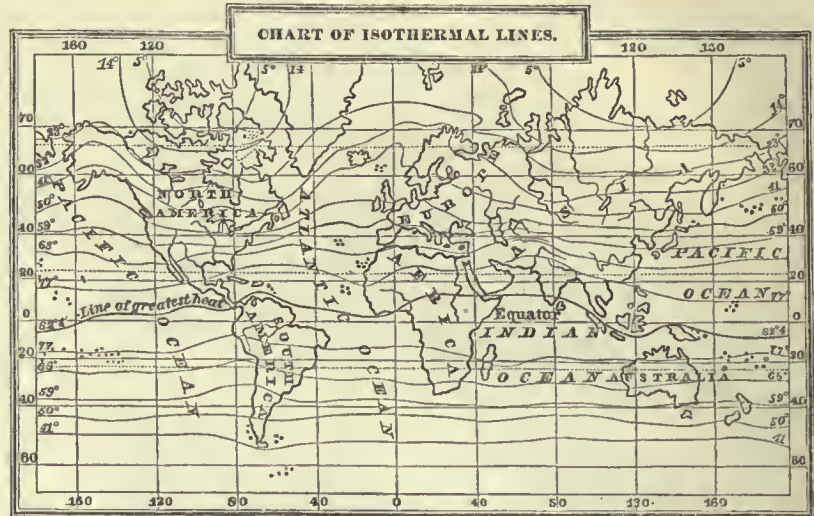
In the Northern Hemisphere, the region of snow (that is, in which snow falls at sea-level) embraces most of the United States, with the countries on the north, all of Europe, and the greater part of Asia.

The elevation of the snow-line (that is, the lowest limit at which snow remains unmelted throughout the year) differs in different latitudes. Within the tropics it ranges from 15,000 to 20,000 feet above sea-level, while it descends to the level of the sea in about latitude 80.

Hail.—Rain-drops are sometimes formed in the upper part of the atmosphere, and in their descent fall through a stratum of air at the

freezing-point, when they assume the form of *hail*; if they freeze only partially, they form *sleet*. Hail-storms often occur in summer, owing to the sudden congelation of atmospheric currents; they are most frequent in temperate climates.

Climate.—The term climate signifies the prevailing character of the weather at any place.



ISOTHERMAL LINES connect places having the same mean annual temperature. The figures over the extremities of each isothermal line in the above Chart show the mean annual temperature of the places through which it passes. Observe through what grand divisions the line of greatest heat passes.

The climate of a place is affected by the following circumstances:—
1. Its latitude. 2. Its height above the level of the sea. 3. The position and direction of the mountain-chains. 4. Its distance from the sea. 5. The slope of the country. 6. The character of the soil. 7. The degree of cultivation which it has received, and the density of its population. 8. The prevalent winds. 9. The quantity of rain that falls.

LESSON XIII.

Physical Geography—Continued.

Metals are very widely diffused over the earth. They are sometimes found pure, but are generally mixed with other minerals, in a rocky substance called *ore*. The principal metals are gold, platinum, silver, iron, copper, zinc, lead, tin, and mercury or quicksilver.

Gold.—This is the most precious of the metals. It is usually found in grains, or gold-dust, in a pure state.

Gold is extensively diffused throughout the United States. The Appalachian region extends from the Rappahannock River, in Virginia, to the coast of Alabama. The California gold region, noted for its richness, is in the great valley of the Sacramento and San Joaquin (*sahn ho-ah-keen'*), nearly 500 miles long by about 50 in breadth. Gold is also very abundant in Colorado; and there are rich fields of this precious metal in Idaho, Montana (*mon-tah'nä*), New Mexico, and Arizona.

The gold region of Australia, one of the most productive in the world, occupies the south-eastern part of the continent.

Gold is also found in Mexico and Central America; in South America, along the base of the Andes and in Brazil; in Europe, at Kremnitz in Austria, and other places. It is abundant in Western

Siberia; and is found in Africa among the Kong Mountains and in various parts of the eastern coast. The islands of Malaysia, particularly Borneo, Celebes (*sel'e-biz*), and Sumatra, also produce gold.

Platinum.—Platinum, a grayish metal, is found in some of the gold washings of South America, and in the Ural Mountains is produced in considerable quantities.

Silver.—Silver is found in several localities in the western part of the United States—in Nevada, Arizona, New Mexico, Idaho, and Montana. The mines of Nevada and Arizona are particularly rich.

Mexico contains the richest silver mines in the world. In South America, there are very productive mines in Peru, Bolivia, and Chili.

The quantity of silver found in other parts of the world is comparatively insignificant. The principal mines in Europe are those of Schemnitz (*shem'nitz*) and Kremnitz, in Hungary, and those of Spain.

Iron.—This is the most useful and extensively diffused of all the metals. It is found in the greatest abundance in the United States and Europe. In the former, the states most noted for its production are Pennsylvania, New York, Ohio, New Jersey, Massachusetts, Kentucky, Maryland, and West Virginia. Iron ore is also abundant in the great mineral region south of Lake Superior, in Tennessee, Georgia, Missouri, and other states. Iron Mountain, in Missouri, is composed entirely of iron ore.

Copper.—Copper ranks next to iron in utility, and, though less abundant, is found in many parts of the earth. It is sometimes obtained in pure masses weighing several tons. The richest and purest copper mines in the United States, and probably in the world, are found in Northern Michigan, on the shores of Lake Superior.

The most noted copper region of South America is in Chili; the most noted of Europe is in England.

Zinc.—The countries most noted for extensive zinc mines are Prussia and Belgium.

Lead.—Lead is found in greater or less quantities in all countries. Those particularly distinguished for the amount of lead annually produced, are the United States, Great Britain, and Spain. The great lead mines of the United States lie on each side of the Mississippi River, in North-western Illinois, South-western Wisconsin, and Iowa; and in Missouri, south of the Missouri River.

Tin.—This metal is found in but few countries. The most noted places where it is obtained, are Cornwall, in England, and the island of Banca, in the East Indies.

Mercury.—The principal quicksilver mines of the world are those of California; of Peru, in South America; of Idria, in Southern Austria; and of Almaden (*ahl-mah-den'*), near Cor'dova, in Spain.

Coal.—Coal is particularly abundant in parts of British America and the United States, in South America, in Great Britain, in portions of the European Continent, and also in China. It is believed that the largest coal-fields in the world are those of the United States.

Petroleum.—Petroleum, or rock oil, an inflammable bituminous liquid, is found in various parts of both the Eastern and the Western Continent. It is particularly abundant in Pennsylvania, West Virginia, and Canada.

Amber.—This is a resinous substance often made into ornaments. It is obtained chiefly in Prussia, on the shores of the Baltic, where it is found in the sand and sea-weed, and also by digging below the surface.

LESSON XIV.

Physical Geography—Continued.

Chief Food-Plants, etc.—The chief food-plants are grains, fruits, grasses, and tuberos roots. The principal plants that produce materials for clothing, are cotton, flax, and hemp.

Cotton is most extensively raised in the southern part of the United States. Flax and hemp are largely cultivated in the United States and in parts of Europe.

Plants of the Torrid Zone.—This zone is noted for palms, bananas, sugar-cane, coffee, cocoa-nuts, spices, yams, rice, maize, arrow-root, cassava-root, etc., together with a great variety of luscious fruits. Its timber-trees are both numerous and important; the hardest and heaviest woods are generally produced here, also most of the dye-woods.

Plants of the Temperate Zones.—In these zones, wheat, barley, oats, rye, maize, grasses, flax, hemp, the vine, the apple and similar fruit-trees, flourish; together with several kinds of berries and a great variety of garden vegetables. Here are found forest-trees in great variety, the oak, the hickory, the pine, the elm, the beech, the fir, the cedar, and the maple.

The warmer regions of the temperate zones produce a great variety of what are called tropical fruits and plants; such as oranges, lemons, figs, olives, sugar-cane, coffee, rice, etc.

Plants of the Frigid Zones.—In these zones, all trees, except birches, beeches, alders, and a few others, almost entirely disappear. Vegetation is exceedingly scanty; but heath, moss-plants, and lichens, are abundant on the rocks, and grass grows during the summer. Such is the power of the sun at this season, that plants spring up, blossom, produce their seed, and die, in about six weeks.

In that part of the Arctic region which borders on the north temperate zone, barley and oats flourish in the valleys. Vegetation ceases in the northern hemisphere in about latitude 75°, in the southern hemisphere in latitude 59°.

Perpendienar Distribution of Plants.—Plants have a perpendicular distribution, in an order corresponding to their distribution in zones of latitude. Thus, we find on a high mountain range within the tropics, the lower part covered with palms, orange-trees, sugar-cane, etc.; the middle with oaks, elms, firs, and similar trees; the higher part with birches, mosses, and lichens.

Animals of the Torrid Zone.—This zone is as full of animal as of vegetable life; the influence of heat, light, and abundance of vegetation, tending to its increase. The minuter beings,—insects, reptiles, birds, etc., here swarm in great numbers; together with animals of gigantic size, such as the elephant, camel, rhinoceros, giraffe, tapir, and hippopotamus. Here, too, is the region of numerous animals of prey, the lion, tiger, puma, and hyena,—the vulture and condor,—the rattlesnake and boa constrictor.

Among the remarkable species of the African tropical regions, not mentioned above, are the crocodile of the Nile, the baboon, the gorilla, and a great variety of antelopes.

Animals of the Temperate Zones.—The temperate zones are favorable to herbivorous animals,—as the horse, ass, ox, buffalo, deer, and sheep. Among the chief beasts of prey, are the wolf, fox, lynx, bear, and otter.

Animals of the Frigid Zones.—Among the most conspicuous animals may be mentioned the white bear, the moose, the reindeer, the musk-

ox, the white fox, the polar hare, and the lemming. Seals, whales, and walrus, inhabit the ocean. Among the birds are sea-eagles, gulls, cormorants, etc.

LESSON XV.

Political Geography.

Political Geography treats of the various countries on the earth's surface, their people, customs, religion, and government.

Races of Men.—The human species is divided into five races; the Caucasian, the Mongolian, the American, the African, and the Malay.

Names.	Est. Number.	Names.	Est. Number.
Caucasian, or European,	450,000,000	American, or Indian,	10,000,000
Mongolian, or Asiatic,	500,000,000	African, or Negro,	80,000,000
Malay,	40,000,000		



The Caucasian, or White Race are distinguished by their fair skin, fine and long hair, full high forehead, regular features, and symmetrical form. They inhabit South-western Asia (including Arabia, Persia, and Hindostan), the north of Africa, and most of Europe, and have extended their dominion to the greater part of the Western Continent, to South Africa, Eastern and Southern Australia, and New Zealand.

The Mongolian, or Yellow Race have a sallow olive complexion; long, black, straight hair; a square head, low forehead, broad and flat cheek-bones, short nose, and eyes small, pointed, and obliquely set.

The Mongolian is the largest of the five races, constituting nearly one-half of the inhabitants of the earth. Its headquarters are in Eastern and Central Asia, whence it has penetrated into parts of Europe—Finland, Lapland, Turkey, and Hungary. The Esquimaux (*es'ke-mo*) tribes, along the coast of the Arctic Ocean, are also of Mongolian origin.

The American, or Copper-colored Race are characterized by long, black, straight hair, dark and deep-set eyes, high and prominent cheek-bones, an aquiline nose, and receding forehead. This race includes all the native tribes of North and South America, except the Esquimaux.

The African, or Black Race have woolly hair, a long and narrow head, low forehead, large and prominent eyes, thick lips, broad and flat nose, high cheek-bones, and prominent jaws. It consists of the native tribes of Africa (south of Abyssinia and the Great Desert), of Australia, New Guinea, and New Caledonia.

The Malay, or Brown Race are distinguished by a tawny skin; coarse, lank, black hair; a low and broad forehead, large mouth, short broad nose, and eyes obliquely set. They occupy the Malay Peninsula and most of the islands of Oceania.

Social Condition.—Mankind is divided, as respects social condition, into four classes,—Enlightened, Civilized, Half-civilized, and Savage.

Those nations that have made the most progress in art and science, in agriculture, commerce, and manufactures, are called Enlightened.

Those nations that have made considerable progress in the arts and sciences, in agriculture, commerce, and manufactures, though not so much as the Enlightened, are called Civilized.

Those nations whose knowledge of the arts, sciences, and agriculture is very imperfect, whose commerce is limited, and whose manufactures are few and inferior, are called Half-civilized.

Those nations that are unacquainted with the arts and sciences, with agriculture, commerce, and manufactures, and depend almost wholly on hunting and fishing for a subsistence, are called Savage.

Systems of Religion.—The principal Systems of religion are the Jewish, Christian, Mohammedan, and Pagan.

THE JEWISH FAITH recognizes the Old Testament as the highest authority in matters of religion, but not the New.

THE CHRISTIAN FAITH recognizes both the Old and the New Testament as authority in religious matters.

THE MOHAMMEDAN FAITH recognizes one God, and Mohammed as his "last and greatest prophet," who substituted for the Bible a book called the Koran.

THE PAGAN FAITH does not recognize the God of the Bible, but substitutes a variety of images, birds, beasts, reptiles, etc.

Names.	Est. Number.	Names.	Est. Number.
Jewish, ...	5,000,000	Mohammedan, ...	160,000,000
Christian, ...	250,000,000	Pagan, ...	665,000,000

Languages.—There are 860 languages spoken in the world, and about 5,000 dialects. The language spoken by the greatest number is the Chinese; the one most widely spread is the English.

Government.—Government is that form of rules and principles by which a nation is governed. The supreme power of a government consists of three parts; viz., the Legislative, which enacts the laws; the Judicial, which determines their application in individual cases; and the Executive, which puts them in execution.

Forms of Government.—There are three distinct forms of government; viz., monarchical, aristocratic, and democratic.

A MONARCHICAL FORM OF GOVERNMENT gives the supreme power to one person, who may be styled king, queen, emperor, empress, sultan, etc. When the sovereign is limited in the exercise of his powers by a Constitution or Council, the government is called a Limited Monarchy; when not, it is an Absolute Monarchy.

AN ARISTOCRATIC FORM OF GOVERNMENT vests the supreme power in a few privileged men, styled nobles or chiefs.

A DEMOCRATIC FORM OF GOVERNMENT vests the supreme power in rulers chosen by, and from, the whole body of the people, or by their representatives assembled in a national congress.

Aristocracy may be combined with monarchy and democracy. In this case, the king or queen represents the monarchy; the nobles, the aristocracy; and the commons, or representatives chosen by the people, the democracy. Such is the government of Great Britain.

Political Divisions of the Earth.—The political divisions of the earth are empires, kingdoms, republics, states, cities, towns, etc.

An Empire is a country governed by an Emperor.

A Kingdom is a country governed by a King or Queen.

A Republic is a country governed by men who are chosen by the people. A union of democratic republics is styled a Federal Democratic Republic; such is the political title of the United States.

A State is a division of country which has an independent government for the regulation of its own affairs, and may or may not be united with other divisions like itself under a general government.

A Duchy is a country governed by a Duke. A Grand Duchy is a country governed by a Grand Duke. A Principality is a country governed by a Prince. An Electorate is a country governed by an Elector. A Landgraviate is a country governed by a Landgrave.

REMARK.—In Germany, certain princes formerly elected the emperor, and *Elector* was one of their titles. *Landgrave* signifies earl or count.

Empires, kingdoms, states, etc., are generally divided into Counties, Parishes, Districts, Shires, Provinces, Departments, or Cantons.

A Township is a division of a county.

A Village is a small collection of houses and inhabitants.

A Town is a large collection of houses and inhabitants.

A City is an incorporated town; that is, a town invested by law with certain rights and privileges which it did not before possess.

The Capital of a country is the city in which the officers or legislature meet to make laws. The Metropolis of a country is its chief city, or that which contains the greatest number of inhabitants.

The CHIEF MAGISTRATE of a Republic is called President. The chief officer of a Republican State is called Governor. The chief officer of a city is called Mayor.

LESSON XVI.

Political Geography—Continued.

Chief Branches of Industry.—The chief branches of industry are agriculture, manufactures, commerce, and mining.

Agriculture is the cultivation of the soil for the purpose of producing vegetables, fruits, grain, etc. It is carried to great perfection in the British Isles, also in Central and Western Continental Europe, and in many parts of the United States.

Manufactures are articles made from raw materials by the hand or machinery; as, cloth from wool, or linen from flax. Animal, vegetable, and mineral productions, in their natural state, are called raw materials. The countries most noted for manufactures, are Great Britain, Holland, Belgium, Germany, Switzerland, France, and the United States.

Commerce is the exchange of goods, and is either Foreign or Inland. Foreign commerce is the trade which one nation carries on with another. Inland commerce is the trade between individuals of the same nation. The countries most noted for commerce are Great Britain, the United States, France, Holland, Denmark, Sweden, and Russia.

Articles sent out of a country in the course of trade are called Exports. Articles brought into a country in the course of trade are called Imports.

Mining.—Mining is the business of digging into the earth to obtain mineral productions; such as gold, silver, coal, salt, etc.

Directions for Memorizing the Contents of a Map.

Countries.—Begin at the north-west corner of the map, mention the countries which are situated along the northern border, next those on the eastern, then those on the southern, and lastly those on the western. When there are countries in the interior, mention them last of all.

Capitals and other Cities.—Mention the capitals and other cities in the same order as above, naming those in or near the center last.

Islands.—Begin at the north-west corner of the map, look along the coast and some distance from it, taking an easterly, southerly, westerly, and northerly course, and mention the islands as you find them.

Peninsulas and Capes.—Commence at the same corner of the map as before directed, and look along the northern coast, then the eastern, next the southern, and lastly the western, and name the peninsulas and capes in the order you meet with them.

Mountains.—Follow the directions given for memorizing cities.

Seas, Gulfs, Bays, Straits, Sounds, and Channels.—In mentioning these divisions, observe the directions given above for capes.

Rivers.—I. Mention first those rivers which empty into bodies of water on the north, then those which flow into bodies of water on the east, next those which empty into bodies of water on the south, and lastly those which flow into bodies of water on the west.

II. Whenever you mention a river, see whether it has any branches; if so, name them before passing to the next river in order.

III. If the river runs a northerly or a southerly course, name its eastern branches first, beginning with the one nearest the source of the main river, and then the western branches in like manner.

IV. If the main river runs an easterly or a westerly course, name its northern branches first, beginning as before directed.

Lakes.—Lakes are to be memorized in the same order as rivers; that is, those lakes whose outlets lead into northern bodies of water first, and so on. Lakes having no outlets must be mentioned last.

REMARK.—Physical and political divisions which are connected only with islands, are to be mentioned after those situated on, or connected with, the main-land. For example, in mentioning the straits of North America, Davis Strait should be named after the others, because it is not connected with the main-land of North America.

TO THE TEACHER.—It is impossible to give an idea of the relative size of countries from maps alone. Owing to their diversity of form and irregular outlines, even were the maps on the same scale, we could not hope to convey any correct notion of their actual or comparative size. There is but one way of doing this. With the map hung up before his class, let the teacher dictate, in round numbers, the area of the different grand divisions and countries in square miles, till, by repeating the numbers after him, each pupil has thoroughly committed them to memory. Let the teacher then impress these numbers on the minds of his pupils by making them compare the countries learned,—by asking how many times larger or smaller one is than another, what two are nearly of the same size, etc. By devoting to this exercise a few minutes after each regular recitation, the absolute and comparative size of all the countries on the globe can be readily mastered, not only without difficulty, but with interest and pleasure on the part of the learner.

The following order is suggested:—

Continents and Grand Divisions of the Earth.
The Chief Divisions of North America.
The Political Divisions of British America.
The States of the United States.
Review: compare all the countries learned.
The Chief Divisions of South America.
The Chief Divisions of Europe.

The Chief Divisions of Asia.
The Chief Divisions of Africa.
Review: compare all the countries learned.
The larger Islands of the West Indies.
The larger Islands of Oceania.
Review: compare all the countries and islands thus far learned.

EXPLANATION.

The small letters on the flags in this work, are designed to indicate the color of their stripes, etc. Thus B. is blue; Y., yellow; G., green; R., red; and W., white.

LESSON XVII.

What part of North America is visited by earthquakes? What parts of South America? What part of Europe? Of Asia? Of Africa? Of Australia? What island in the north Atlantic is noted for its earthquakes and volcanoes? In what zones are earthquakes rare?

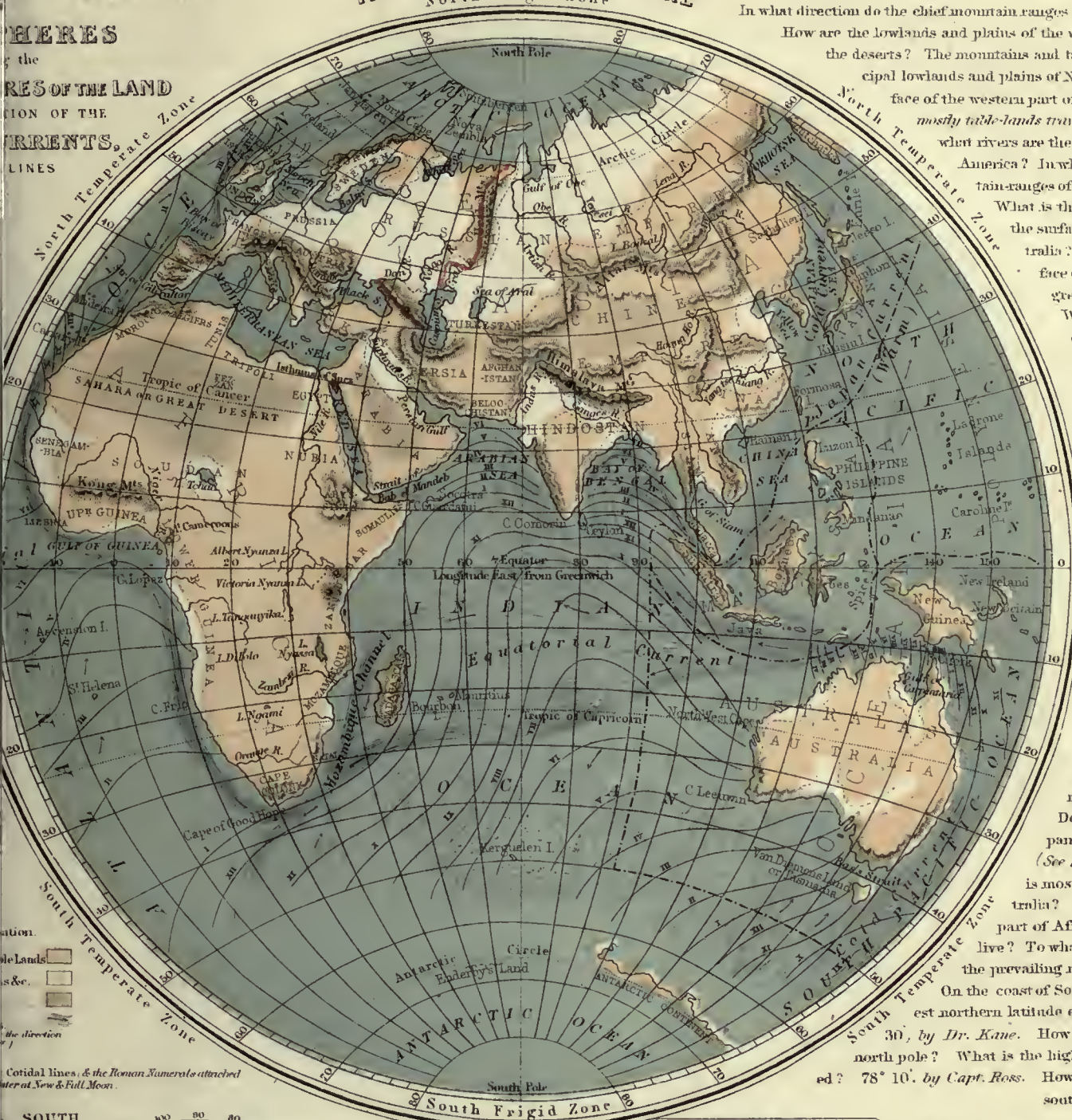


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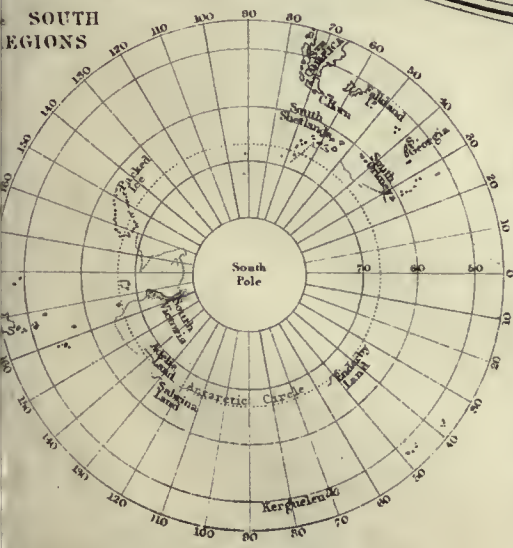
In what direction do the chief mountain ranges of the Western Continent extend?
How are the lowlands and plains of the world shown on the map? How, the deserts? The mountains and table-lands? Where are the principal lowlands and plains of North America? Describe the surface of the western part of North and South America. *It is mostly table-lands traversed by mountain-ranges.* Along what rivers are the principal lowland plains of South America? In what direction do most of the mountain-ranges of Europe and Asia extend?

What is the character of the greater part of the surface of Asia? Of Africa? Of Australia? What is the character of the surface of the northern part of Asia? The greater part of Russia in Europe? What grand division is noted for its extensive desert?

On what waters would a person sail, in a voyage from New York to Australia, via Cape of Good Hope? What is the sailing-distance between these two places? *About 14,000 miles.*

On what waters would a person sail, in a voyage from New York to the Sandwich Islands, via Cape Horn? From London to Japan, via Cape of Good Hope? What current flows along the western coast of South America? Where is the equatorial Drift Current? How does the Great Equatorial Current of the Atlantic flow? Between what continents, and in what direction, does the Equatorial Current of the Indian Ocean flow? Describe the Gulf Stream. The Japan Current.

(See right-hand Chart.) By what race is most of Asia inhabited? Most of Australia? Most of Africa? The northern part of Africa? Where do the Esquimaux live? To what race do they belong? What is the prevailing race in the U. S.? In Mexico? On the coast of South America? What is the highest northern latitude ever reached by explorers? *82° 30', by Dr. Kane.* How many degrees is that from the north pole? What is the highest southern latitude ever reached? *78° 10', by Capt. Ross.* How many degrees is that from the south pole?



LESSON XVIII.

MAP DRAWING.

The system of Map Drawing presented some years ago in connection with this Series of Geographies, in a set of Cards adapted to its Maps, has proved so popular and useful an auxiliary in impressing on the learner's mind the outlines of different countries and the relative position of their most important localities, that it is thought not out of place to give some instruction on the subject in this volume, particularly appropriate to those who are furnished with the Cards in question, but designed to bring the exercise within the reach of all, whether thus provided or not.

The system here set forth, requiring no acquaintance with mathematical terms or geometrical problems, has been found practicable and attractive. It may be commenced even with Primary Classes, and will train the eye and hand, while it interests the pupil in the subject and aids in imparting geographical knowledge.

COPYING FROM THE MAPS.

The simplest exercise is for the pupil, with a map before him, to reproduce the country or countries it represents. He may do this on Map Drawing Cards, on his slate or ordinary paper, or on the black-board.

COPYING ON MAP DRAWING CARDS.—Each pupil should be furnished with a set of Map Drawing Cards prepared to accompany this volume, —of the same size as its maps, and having the meridians and parallels of latitude laid down on them.

Besides these there are needed, 1. A lead-pencil; No. 2 or B is the right grade. 2. A piece of India-rubber. 3. A pen and ink. 4. A red pencil. 5. A cake of Prussian blue, burnt sienna, and vermilion. 6. A saucer. 7. A small camel-hair pencil. 8. A small flat brush. 9. A twelve-inch ruler, divided into inches, subdivided into halves and quarters.

Outlining.—Having placed before you the map to be drawn, and selected the corresponding Card, commence the outline with your pencil at the upper left-hand corner. Start with any prominent point of coast or boundary there; and, observing between what parallels and meridians it is situated, make a dot in the same relative position on the Card. Following the coast or boundary along the top of the copy toward the right, locate the next prominent point with a dot in the same way, and connect the two with a line similar to that which joins them in the copy.

Proceed in this way from one point to another till you reach the right side of the map, and pursue the same process down this side to the lower corner. Then go back to the starting-point, work down the left side, and so along the lower part to the right. By observing this order, both here and afterward, in filling in, you will avoid soiling the page by rubbing your hands on lines previously drawn. Coasts are represented by continuous lines; boundaries that separate contiguous states, by dotted lines.

Do not use compasses to measure your distances. Accustom the eye to this. If you make errors at first, do not be discouraged, for you will soon improve, and the eye is greatly benefited by the exercise.

Draw slowly and with care. Do not bear on heavily. As each step is taken, compare your work with the model; if anything is wrong, erase it with rubber and draw it over. Try to avoid mistakes, however, for the frequent use of rubber soils the paper.

When the outline is finished in pencil, go over it with pen and ink. If there are islands on the map, they must be taken next and treated in the same way as the main-land, their positions being fixed by their distances from the nearest parallels and meridians. Next draw whatever lakes there may be in the country represented. Then draw the boundary lines that separate the different states.

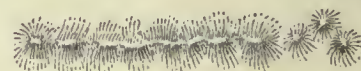
Coloring.—Rub the cake of Prussian blue with a little water on your saucer, and then add more water till you get a very light tint. Fill the flat brush, and draw it once hastily over such parts of the map as represent bodies of water lying outside of the outline just drawn,—oceans, seas, bays, or gulfs. There must be no repainting, or the paper will be blistered and the shade will not be uniform. Be careful that the brush does not pass over the outline. Minute indentations of coast may be attended to afterward with the camel-hair pencil. Then cover with the same light-blue tint lakes within the outline, using the camel-hair pencil where it is necessary, and giving but one coat.

Having finished the water surface, clean your saucer and brush, and rubbing the cakes of burnt sienna and vermilion on the saucer, mix these colors till you produce a tint as near that of the land as possible. Apply this to the land surface in the manner before directed. Now with your red pencil go over the dotted boundary lines already drawn.

Filling in.—Next proceed to fill in the details. Were this done before coloring, there would be danger of the ink's running. Take one class of things at a time; and, first drawing all of that class with the pencil to prevent mistakes, go over them with ink before proceeding to the next class. Observe the following order:—

RIVERS.—Commence at the source and work toward the mouth, locating each prominent point by observing its distance from parallel and meridian. Rivers are represented by waving lines, which increase in width as you approach the mouth.

MOUNTAINS.—To represent mountains, make a series of little curves in the direction in which the range runs. Then draw a number of fine lines, radiating from these curves, as in the engraving. The higher the mountains are, the heavier these lines should be. For mountain peaks, draw a minute heavy circle, and fine lines radiating from it in every direction, as shown at the right of the above engraving.



MOUNTAINS.

CITIES AND TOWNS must be located according to their distance from parallels and meridians, and their position relatively to the rivers already drawn. Denote them by these characters, distinguishing capitals from other places.

CANALS AND RAILROADS may also be introduced, if desired. For canals draw two parallel lines very close together; and for railroads the same, with cross lines at small intervals.



Lettering.—The names should now be inserted, as in the model. Use for this purpose a fine-pointed pen, without any previous penciling, and allow a little more space for the names than is required in the model. If necessary, leave out some of the less important places. As a general thing, you will find it best to use the same arrangement of names that you find in the map you are copying.

Adapting the Scale.—The Cards of this Series are specially adapted to the maps of Cornell's Grammar School Geography, or others on the same scale. They can be used, however, for copying maps of any size. When there is much difference in the scales, instead of locating

a point by its actual distance from parallel and meridian, observe its latitude and longitude by dividing with the eye the space between the parallels above and below it, and the meridians on each side of it, and place it in the same latitude and longitude on the card by making a similar division of the space there. When you are filling in, follow the same rule for locating places.

When a map of *about* the same scale is to be copied, the drawing will be sufficiently correct without going into these calculations.

Length of Lessons.—Do not attempt all this at one sitting, but let it be divided into a number of exercises, equal to the lessons in the Map Studies, Map Questions, and Descriptive Geography, on the grand division or states in question,—so that the Map Drawing may just keep pace with these throughout the volume.

While, for instance, the map questions and descriptive geography of North America are being learned, let the map of North America be drawn, part at a time. The northern coast may constitute one lesson; the Atlantic and Gulf coast, a second; the Pacific coast, a third; the islands, a fourth; the lakes, a fifth; the coloring, a sixth; the rivers, a seventh; the mountains, an eighth; the locating of the cities, a ninth; and the lettering may suffice for several lessons.—Better do a little well, than a great deal poorly.

COPYING ON A SLATE OR PAPER.—When the pupil is not furnished with Map Drawing Cards, he may use his slate or ordinary paper. In this case, he had better commence with small divisions of territory, such as individual states, where it will be sufficiently accurate to represent the parallels and meridians by straight lines intersecting at right angles.

Let him first, with the aid of his ruler, lay off an oblong figure or square, a little larger than the state he is about to draw. Then let him locate as accurately as possible (measuring the distances, that he may have them correct) the parallels and meridians that cross the state in the map he is copying, and mark their degrees in the margin. When this is done, the pupil has made his own Map Drawing Card, and may now proceed with the outline as before directed.

Example in Outlining.—Let it be required to draw a map of Pennsylvania, as represented on the map of the Middle States, page 33.

We commence by ruling off an oblong figure a little larger than

the outline of the state, and locate the parallels and meridians, taking care to have them exactly the same distance apart as in the model.

Looking at the model, we find that the most north-westerly point of the state is near the 42d parallel, and east of meridian 81° about one-fourth of the distance between 81 and 79. Accordingly, we locate this point in the corresponding part of our map, at A.

The next prominent point toward the east is just half way between the two meridians; and, measuring with the eye the distance it is north of 42°, we locate it at B, and connect A B with a slightly waving line, representing the lake coast. From B we observe that the boundary runs directly south to par. 42, and draw it accordingly. Then we follow the parallel with our outline till we reach a point (D) about as far west of meridian 75 as A is east of meridian 81.

The next point at which the general direction of the boundary changes is south of parallel 42, a little less than one-third of the distance between it and par. 40. Measuring with the eye its distance east of meridian 75, we locate it at E, and draw the boundary, making that part of it which represents the Delaware River a waving line.

The next prominent point is about as far west of meridian 75 as E is east of it, and somewhat more than half way between 42 and 40. We mark the point, F, and connect E and F with a waving line, as in the model. G is next located as far east of meridian 75 as E, and the same distance north of parallel 40. H and I are next located, and the boundary continued to these points. From I we run west to a point (J) as far east of parallel 81 as A is. Then, joining J and A with a straight line, we have the outline complete.

LESSON XIX.

MAP DRAWING (CONTINUED).

COPYING ON THE BLACK-BOARD.—The single-page maps in this volume are about 10 inches by 8. When copying a map on the black-board, it will be well to increase the scale.

First lay off with your ruler an oblong with sides 2, 3, or 4 times as large as those of the map (as may be required),—that is 20 inches by 16, 30 by 24, or 40 by 32. Measuring with the inch divisions of your ruler, mark on the sides of this oblong the points where the parallels of latitude and meridians represented

in the map will fall, allowing two, three, or four inches for one in the model, according as you have doubled, trebled, or quadrupled the scale. Then draw the parallels and meridians very lightly by connecting these points, observing that the meridians are not parallel, but approach each other as they draw near the poles.

At first it may be well for the teacher to place meridian lines and parallels on the board before recitation, the pupil to commence with the outline. After a time he may do it in the presence of the class, showing them how each step is to be taken; and finally he may require them to do it for themselves.

The Class to follow on their Slates.—The whole class should be provided with slates, and with their maps before them should



follow the steps taken successively on the board, different pupils being called to the board at intervals.

Each Step to be described.—Before locating any point or drawing any line, the pupil at the board should be required to tell what he is about to do.

Thus, in beginning the state of Pennsylvania, he should say, "The most north-westerly point of Pennsylvania is in about latitude 42° N. and longitude $80\frac{1}{2}^{\circ}$ W.;" he then locates the point, any error that he may make being corrected by the class. He then goes on, "The next prominent point is north-east of this, in about lat. 80° and lon. $42\frac{1}{4}^{\circ}$," and locates the point B. "Connecting A and B, we have the lake-shore of the state;" he then draws the line. So he proceeds, stating each step as he takes it.

The Scale to be stated.—It will be well for the teacher always to require the scale of the map to be stated. If the drawing is made on a Card, the scale can be told by measuring with the ruler an inch on the scale in the model, and seeing how many miles it embraces. If the drawing is on the black-board, this number has only to be doubled, trebled, or quadrupled, as the case may be.

Estimating Dimensions, Distances, etc.—The scale being known, the teacher may put a variety of useful questions on the dimensions of the state drawn, the distance in a straight line between its principal localities, etc. Thus, measuring in the way directed, we find from the map on p. 33 that the scale on which the state of Pennsylvania is drawn on p. 17, is 70 miles to the inch. As then it is $2\frac{1}{4}$ inches broad, the pupil will readily find that the state is about $2\frac{1}{4}$ times 70, say 160, miles in breadth; and, as its extreme length from east to west is about $4\frac{1}{4}$ inches, that it is about 300 miles long.

In like manner we may determine the distance in an air-line between any two places. We find with our ruler that from Philadelphia to Harrisburg is an inch and a quarter; which makes the direct distance between these places $1\frac{1}{4}$ times 70 miles, or about 90 miles. So, between Reading and Pittsburgh we find a space of 3 inches, which makes the distance between them in a direct line 3 times 70 or 210 miles.

We may measure the breadth of the state in another way. The northern boundary is in lat. 42° ; the southern in $39\frac{3}{4}^{\circ}$. The breadth is therefore $2\frac{1}{8}$ degrees of latitude. But we have learned that every degree of latitude is equal to $69\frac{1}{4}$ miles. Pennsylvania is therefore $2\frac{1}{8}$ times $69\frac{1}{4}$ miles, or about 160 miles—a result which agrees with that obtained before with the scale of miles.

Different Scales.—Where there is sufficient extent of black-board for the purpose, several pupils may be called up at once, or a whole class if there is room, and locate their points and draw their lines simultaneously, stating each in turn the steps successively taken. When this is done, it will be well to have different scholars use different scales.

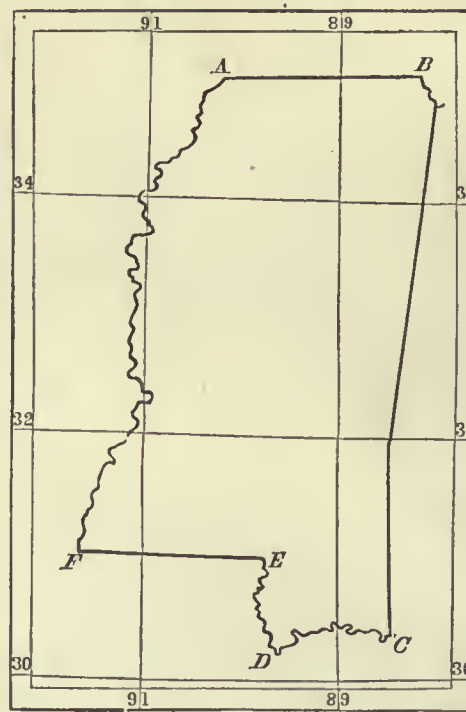
A class will soon acquire such facility that this exercise can be speedily performed. The same state or grand division should be drawn over and over on different scales till its shape is made perfectly familiar.

DRAWING FROM MEMORY.

Older pupils, who have had experience in Map Drawing, will find it an improving exercise to try to draw from memory. This is a severe test of map knowledge, but it will show the student where he is deficient, and tend to impress upon his mind many important facts which would otherwise be likely to escape him.

A map should not be drawn from memory till it has been copied

in the manner above described sufficiently often to fix in the mind its shape and the latitude and longitude of a few of its most prominent points. It is unnecessary, indeed it is impossible, to follow every minute indentation of coast or slight change of direction in the boundary. It is enough to have the general outline correct.



In drawing the state of Mississippi, for instance, it will only be necessary to memorize the latitude and longitude of the points A, B, C, D, E, and F; to remember the slight change in the direction of the eastern boundary, in lat. 32, and that the Mississippi River, crosses the 91st meridian a little north of parallel 34 and again a little farther north of parallel 32.

In drawing from memory, it will be well to take countries of regular outline first; but in no case should the exercise be attempted until the pupil is thoroughly prepared for it by previously copy-

ing the map—several times, if necessary.

In all cases, after a sketch is made from memory, the pupil should compare it with the map, and find for himself wherein he has gone wrong. If his drawing is quite inaccurate, he should make another attempt, correcting his previous errors.

When he has succeeded tolerably well in this exercise, it will be well for the student to try what he can do in the way of rapid sketching, without the aid of parallels or meridians. Let him simply draw a figure representing as nearly as he can the outline of the country in question, and then fill in its principal rivers, towns, etc. Here again the benefit will lie in comparing the sketch thus drawn with the map, and ascertaining wherein the proportions or the positions of places are faulty.

Example on page 19.—In consequence of its regular outline, South America is the most easily drawn of the grand divisions. Its outline is presented on page 19. The pupil would commence at the most north-westerly point, A. In drawing the outline, he would have to locate only eleven prominent points, denoted in the figure by A, B, C, D, E, F, G, H, I, J, and K.

In connecting two points, if the outline does not run in the general direction of a parallel or meridian, which will serve as a guide, it is sometimes an assistance to draw a faint straight line between the points on both model and copy, so that the deviations from a straight line may be more clearly shown and more exactly imitated. When the true outline has been drawn and traced with ink, these lines may be removed with rubber.

Thus, in the outline on p. 19, the points B and C, C and D, D and E, F and G, are connected with straight lines to serve as guides in drawing the outline. Similar lines having been drawn on the model, the deviations of the coast-line can be more easily imitated.

SOUTH AMERICA

50 W. Lon.

40



STUDIES ON THE MAP OF NORTH AMERICA,

SYSTEMATICALLY ARRANGED.

LESSON XX.

Countries.—Bound each :—Russian America (which belongs to the United States), British America, the United States, Mexico, Balize (*ba-leez'*), Central America, and Da'nish America (Greenland and Iceland—describe them separately, as islands).

MODEL.—The United States is bounded on the north by British America, east by the Atlantic Ocean, south by the Gulf of Mexico and Mexico, and west by the Pacific Ocean.

Capital Cities.—State the situation of each :—Ottawa, Washington, Mexico, Balize, Reykjavik (*rike'yah-vik*), and Sitka.

MODEL.—Ottawa is situated in the south-eastern part of British America.

Important Places in British America and United States.—State the situation of each :—Halifax, St. John, Quebec, Montreal, Toronto, New Westminster, St. Paul, Chicago (*she-kaw'go*), Cincinnati, Detroit, Cleveland, Buffalo, Albany, Boston, New York, Philadelphia, Baltimore, Richmond, Charleston, Savannah, Mobile, New Orleans, Galveston, Austin, Brownsville, San Francisco, Portland, Salt Lake City, and St. Louis.

Important Places in Mexico and Central America.—State the situation of each :—Chihuahua (*che-wah'wah*), Monterey (*mon-ta-ra'*), Vera Cruz (*va'rah kroos*), Merida (*mer'e-dah*), Acapulco (*ah-kah-pool'ko*), Guadalupe (*gwah-dah-lah-hah'rah*), Mazatlan', San Luis Potosi (*sahn loo'is po-to'se*), La Puebla (*lah pweb'lah*), San José (*ho-sa'*), Managua (*mah-nah'goo-ah*), San Salvador, New Guatemala (*gwah-ta-mah'lah*), and Comayagua (*ko-mi-ah'gwah*).

LESSON XXI.

[Rules for describing the natural divisions of the earth are given on pages 5, 6.]

Islands.—Describe each :—Parry Islands, Southampton, Discoe, Newfoundland, Anticosti, Prince Edward, Cape Breton (*brit'un*), Bermuda Islands, West Indies, Revillagigedo Islands (*ra-veel-yah-he-ha'do*), Vancouver, Queen Charlotte Isles, Sitka, Kodiak (*ko'de-ahk*), and Nunivak (*noo-ne-vahk'*).

Peninsulas.—Describe each :—Melville, Nova Scotia, Florida, Yucatan, California, and Alaska.

Capes.—Describe each :—Barrow, Bathurst, Chidleigh (*chid'le*), Sable, Cod, Hatteras, Canaveral, Gracias (*grah'se-ahs*), Corrientes, St. Lucas, Mendocino (*men-do-se'no*), Flattery, Elizabeth, and Prince of Wales.

Mountain Ranges, etc.—Describe each :—Alleghany, Sierra Madre (*se-er'rah mah'dra*), Sierra Nevada (*na-vah'dah*), Cascade, and Rocky. —Mt. St. Elias, Mt. Fairweather, Mt. Brown, Mt. Hooker, and Mt. Nelson.

LESSON XXII.

Seas.—Describe each :—Caribbean (*kar-rib-be'an*) and Behring.

Gulfs and Bays.—Describe each :—Coronation, Boothia, Hudson, James, St. Lawrence, Delaware, Chesapeake, Mexico, Campeche, Honduras, California, San Francisco, Georgia, Cook's, Bristol, and Baffin.

Straits.—Describe each :—Union, Fury, Hudson, Belle Isle, Florida, Behring, Prince of Wales, Banks, Barrow, and Davis.

Sounds and Channels.—Describe each :—Smith's, Lancaster, and Melville.—Kennedy, Fox, and McClintock.

Inlets.—Describe each :—Bathurst, Wager, and Chesterfield.

Lakes.—Describe each :—Little Slave, Athabasca, Wollaston, Deer, Great Slave, Great Bear, Winnipeg, Lake of the Woods, Superior,* Michigan, Huron, Erie, Ontario, and Great Salt.

LESSON XXIII.

Rivers in Russian and British America.—Describe each :—Kouskovim (*koos-ko-veem'*), Kwichpak, Porcupine, Mackenzie's, Athabasca, Slave, Peace, Great Fish, Churchill, Nelson, Saskatch'awan, Severn, Assiniboine, Red, Winnipeg, Albany, Rupert's, East Main, Great Whale, Koksak, St. Lawrence, Ottawa, Saguenay (*sag-a-na'*), Fraser, and Simpson.

Rivers in the United States and Mexico.—Describe each :—Hudson,† James, Cape Fear, Santee, Savannah, Altamaha (*awl-tä-mä haw'*), Alabama, Mississippi, Ohio, Cumberland, Tennessee, Missouri, Yellow Stone, Big Horn, Nebraska, Arkansas, Canadian, Red, Trinity, Colorado (*col-o-rah'do*), Rio Grande (*re'o grahn'da*), Pecos (*pa'koce*), Colorado (West), Gila (*he'lah*), Sacramento, Columbia, Clarke's, Lewis, San Juan (*hoo-ahn'*), Balsas, and Santiago (*sahn-te-ah'go*).

QUESTIONS ON THE MAP OF NORTH AMERICA,

PROMISCUOUSLY ARRANGED.

LESSON XXIV.

I. Bound North America. Of the countries of North America, which extends farthest north-west? Farthest east? Farthest south? What river forms part of the boundary between Mexico and the United States? What lakes in British America are connected with the Arctic Ocean? What river is their final outlet? What cape is on the northern coast of Russian America?

II. What strait connects the Kamchatka Sea with the Arctic Ocean? Baffin Bay with the Atlantic Ocean? Hudson Bay with the Atlantic? What large island lies in Hudson Bay? What is the southern part of Hudson Bay called? What three rivers flow into James Bay? What four into Hudson Bay? Of these, which is the outlet of Lake Winnipeg? Of what river is the Saguenay a branch?

III. What island is east of Baffin Bay? What islands east of Greenland? Where is Upenavik (*oo-pur'nä-vik*)? Mt. Hecla? What mountain range is in British America? What islands are off the western coast of Russian and British America? What lakes in British America are connected with Hudson Bay? What lakes are connected by the Winnipeg River? By the Slave River?

IV. In what direction are the Bermudas from Iceland? From the Bahamas? Washington from Sitka? Ottawa from Mexico? Richmond from San Francisco? New Orleans from New Westminster? Philadelphia from Salt Lake City? Pike's Peak from Mt. Fairweather? What island on the Pacific coast is in the same latitude as Newfoundland? What islands in the Pacific, west of Mexico?

V. What country in N. America is crossed by the Tropic of Cancer? What two gulfs? What peninsula? What point of the United States is nearest to the Tropic of Cancer? How far north do the United States extend? To the 49th parallel of N. latitude. About how far south?

VI. Of the countries of North America, which is the largest? U. S. Which, next in size? B. A. Which is the smallest? What is the largest island of North America? The longest river? The Mississippi. The largest lake? The largest gulf? The largest bay? The longest range of mountains? The highest mountain? St. E.

* The outlet of Lake Superior is the St. Mary's River; of Lake Michigan, the Straits of Mackinaw; of Lake Huron, the St. Clair River; and of Lake Erie, the Niagara River.

† The Hudson River is in the north-eastern part of the United States, flows a southerly course, and empties into New York Bay. Describe the other rivers according to this model.

NORTH AMERICA





ANIMALS AND PLANTS OF NORTH AMERICA.

- | | | | |
|------------------|-------------------------|---------------------------|-------------------------|
| 1. Skunk. | 8. Opossum. | 15. Virginia deer. | 22. White-headed eagle. |
| 2. Raccoon. | 9. American black bear. | 16. Elk. | 23. Eared owl. |
| 3. Rattlesnake. | 10. Black wolf. | 17. Opossum mouse. | 24. Mississippi kite. |
| 4. Wolverine. | 11. Bison. | 18. Flying squirrel. | 25. Walnut. |
| 5. Wild cat. | 12. American fox. | 19. Black squirrel. | 26. Crested seals. |
| 6. Raccoon. | 13. Musk ox. | 20. Canadian porcupine. | 27. Polar bear. |
| 7. Canadian owl. | 14. Mustangs. | 21. Virginia goat-sucker. | 28. Greenland whale. |

- a. Agave (Mexico).
b. Yucca (").
c. Arrowroot.

- d. Acacia.
e. Horse-chestnuts.
f. Arctic fir.

- g. Sequoia gigantea.
h. Spruce fir.
i. Pine forest.

- j. Magnolia.
k. Cotton plant.
l. Tobacco.

LESSON XXV.

NORTH AMERICA

Geographical Position, etc.—North America lies west of Europe and east of Asia. It extends from about the eighth parallel of north latitude to the Arctic Ocean, and from the Atlantic to the Pacific. The greatest breadth of North America is 3,000 miles, and the extent of its coast 22,000 miles.

Physical Features.—The surface of North America is divided into five physical regions; viz., the Great Northern Plain, the Atlantic Slope, the Great Valley of the Mississippi, the Mexican Table-land, and the Pacific Slope.

The Great Northern Plain, lying north of 50° of north latitude, is a cold and barren waste, gently sloping toward the Arctic Ocean, and containing numerous lakes and rivers.

The Atlantic Slope extends from the Alleghany Mountains to the Atlantic Ocean, and includes the region drained by the rivers that flow into the Atlantic and the Gulf of Mexico, from New Brunswick to Mississippi.

The Great Valley of the Mississippi extends from the Alleghany to the Rocky Mountains. It includes the vast region drained by the Mississippi River and its tributaries.

The Mexican Table-land extends from Utah to Guatemala. It separates the rivers that empty into the Rio Grande and the Gulf of Mexico, from those that flow into the Gulf of California and the Pacific Ocean.

The Pacific Slope extends from the Rocky Mountains to the Pacific Ocean, and includes that part of the United States drained by rivers that

flow into the Pacific Ocean. This slope is traversed lengthwise by several mountain ranges. The most important of these are the Cascade Range, and the Sierra Nevada, some of whose snow-clad peaks have an elevation of about three miles above the level of the sea.

Inhabitants.—The present population consists of Whites, Negroes, Indians, and Esquimaux. The Whites are of European, the Negroes of African, and the Esquimaux of Asiatic, descent. The Indians are the aborigines.

History.—The Continent of America is called the "New World," from its having been discovered comparatively recently. The inhabitants of the Eastern Continent, or Old World, knew nothing respecting this portion of the globe, when Christopher Columbus, in the year 1492, made the voyage that resulted in the discovery of Guanahani (*quah-nah-kah'ne*), or Cat Island, now called St. Salvador. This remarkable man was a native of Genoa, in Italy. In his third voyage he discovered a portion of the American Continent, at the mouth of the Orinoco River.

The first explorer of Continental North America was John Cabot, a Venetian, who, accompanied by his son Sebastian, set sail from England in June, 1497, and discovered that part of the coast of British America now called Labrador. When North America was discovered, it was a wilderness, inhabited by savage tribes subsequently styled Indians.

RUSSIAN AMERICA

Geographical Position.—Russian America, an extensive region, the interior of which is little known, lies in the north-western part of North America.

Physical Features.—Those portions of the coast which border on Behring Sea and the Pacific are high and rocky, but the Arctic coast is generally low and marshy. In the south-eastern part there is a mountain range, of which Mounts St. Elias and Fairweather are the loftiest peaks.

Soil, etc.—The soil is sterile, and the climate exceedingly cold. Fur-bearing animals and fish abound. Grain is produced in the south, in small quantities; a few trees, mostly pines and birches, are found on the hills.

Inhabitants, etc.—The inhabitants are chiefly Esquimaux, Indians, and Russian traders. The country was once a colonial possession of Russia, but now belongs by purchase to the United States.

Manufactures and Exports.—There are no manufactures, the chief employment of the natives being hunting and fishing. The furs which they take are sold to the Russian fur-traders. The exports are furs and fish.

SITKA, on the Island of Sitka, is the capital.



THE MOUTH OF THE SAGUENAY RIVER.

LESSON XXVI.

BRITISH AMERICA.

Geographical Position, etc.—This country comprises all the northern continental portion of North America except the Russian Possessions, and all the islands in the vicinity except Greenland and Iceland. It extends from the Arctic Ocean on the north to the United States on the south, and from the Atlantic to the Pacific Ocean.

How divided.—British America embraces several colonies belonging to the British crown; viz., British Columbia, the Hudson Bay Company's Territory, Canada (consisting of the provinces of Ontario, Quebec, New Brunswick, and Nova Scotia), Newfoundland, and Prince Edward Island.

BRITISH COLUMBIA.—British Columbia is an extensive tract, lying between the Rocky Mountains and the Pacific Ocean. The discovery of rich gold districts along the valley of the Frazer River has attracted a large number of settlers. The soil is good; much of the surface is covered with dense forests. NEW WESTMINSTER, on the Frazer River, is the capital.

THE HUDSON BAY COMPANY'S TERRITORY, or Rupert's Land, comprises a large portion of British America, extending from the Rocky Mountains to Labrador, and from Canada and the United States to the Arctic Ocean.

That part situated south of Lake Winnipeg is called the Red River Settlement. The residents of this region are chiefly emigrants from Scotland, with some Indians and half-castes. The inhabitants of the other portion are mainly Indians and Esquimaux.

Physical Features.—The greater part of the surface consists of dense forests, vast swamps, extensive lakes, large rivers, and lofty mountains.

Soil, etc.—In the northern districts the soil is barren; but in the south

it is tolerably fertile. The climate is so cold that wine is often found frozen in a solid mass; and the bays and lakes are covered with ice during half the year. Of the fur-bearing animals, which are here numerous, there are upwards of twenty different kinds. The seas and lakes abound in morses, seals, cod, etc. There are indications of mineral wealth in various parts.

Exports.—The inhabitants being wholly occupied in hunting and fishing, the chief exports are furs, dried and salted fish, oils, and walrus-ivory.

YORK FACTORY, a settlement on Hayes River, is the capital and chief trading-station of the territory. FORT GARRY, in the Red River Settlement, is an important trading-post.

DANISH AMERICA.

Geographical Position, etc.—Danish America, situated east of British America, comprises Greenland, Iceland, and some smaller islands.

GREENLAND (supposed to be an island, though its northern coast is unknown) lies between Baffin Bay and the Atlantic Ocean.

Physical Features.—A chain of mountains is supposed to extend the entire length of the island. Vast glaciers descend to the shore, and, becoming detached, float as icebergs into the adjacent seas.

Soil, etc.—The soil is barren, and the climate is very severe; July being the only month in which there is no snow. Kitchen vegetables are produced in the southern part. Seals inhabit the surrounding seas, and are of great importance to the Greenlanders, supplying them with food, clothing, etc.

Inhabitants, etc.—The inhabitants are chiefly Esquimaux, engaged in hunting and fishing. Many of them have been converted to Christianity. The exports (sent chiefly to Denmark) consist of eider-down, skins of seals and other animals, whalebone, and fish-oil; for which the Greenlanders receive various manufactured articles.

ICELAND, situated in the Atlantic, is 700 miles west of Norway, and 200 miles east of Greenland.

Physical Features.—The surface is generally mountainous. About 30 volcanoes have been discovered on this island, the chief of which is Hecla.

Soil, etc.—The soil is generally barren, and the climate is very variable. The longest day of summer and the longest night of winter last each about a week. The aurora borealis is seen in Iceland in all its brilliancy. No trees grow on the island; there are only a few stunted shrubs and mosses.

Birds are plentiful, the most valuable of which is the eider-duck. The Geysers, or boiling springs, are interesting curiosities.

Inhabitants, etc.—The inhabitants are of the Scandinavian stock. The island is ruled by an officer appointed by the king of Denmark. Lutheranism prevails. The leading pursuit is cod-fishing.

Exports.—The exports consist chiefly of knit stockings, oil, fish, sulphur, and moss. REYKJAVIK, the capital, is a small town on the south-western coast.



THE GREAT GEYSER, ICELAND.

THE BRITISH PROVINCES



STUDIES ON MAP OF BRITISH PROVINCES,

SYSTEMATICALLY ARRANGED.

LESSON XXVII.

Provinces.—Bound each :—Ontario, Quebec, New Brunswick, and Nova Scotia.

Capital Cities.—State the situation * of each :—Ottawa, Fredericton, and Halifax.

Important Places in Ontario and Quebec.—State the situation of each :—Prescott, Kingston, Toronto, Hamilton, London, Windsor, and Barrie,—Quebec, Three Rivers, and Montreal.

Important Places in New Brunswick and Nova Scotia.—State the situation of each :—Bathurst, Chatham, St. John, Truro, Liverpool, and Yarmouth.

Islands.—Describe each :—Anticosti (*an-te-kos'te*), Newfoundland, Cape Breton, Prince Edward, and Magdalen Islands.

LESSON XXVIII.

Capital Cities on the Islands.—State the situation of each :—St. John's, and Charlotte Town.

Towns on the Islands.—State the situation of each :—Harbor Grace, Sydney, and Louisburg.

Capes.—Describe each :—Charles, Canso, Sable, Bauld, Race, Ray, North, and Breton.

Gulfs and Bays.—Describe each :—Hudson, James, St. Lawrence, Chaleur (*shah-loor'*), Fundy, Georgian, Notre Dame (*no't'r dam*), Trinity, and Placentia.

Straits.—Describe each :—Belle Isle, Northumberland, and Canso.

Lakes.—Describe each :—Abbittibe, Mistis'sinnie, Clearwater, Meshickemau (*me-shik'e-mo*), Nipissing, Simcoe, Temis'aming, Grand, St. John, and Bathurst.

LESSON XXIX.

Rivers that flow toward James and Hudson Bay.—Describe each :—Albany, Moose, Abbittibe, Harricanaw (*har're-kanaw*), Rupert's, East Main, Great Whale, and Clearwater.

* In describing the situation of a city, state in what part of the country it is, and on or near what body of water. If it is on a river, state whether it is on the right or left bank to a person sailing down. Thus :—Ottawa is in the south-eastern part of Ontario, on the right bank of the Ottawa River.

Rivers in Ontario and Quebec.—Describe each :—Meshickemau, St. Lawrence, French, Severn, Grand, Ottawa, Aux Lièvres (*o-le-ay'v'r*), St. Maurice (*mo-ress'*), Saguenay, Bet-siamite, Richelieu * (*resh-e-lu'*) or Sor'el, St. Francis, and Chaudière (*sho-de-air'*).

Rivers in New Brunswick, etc.—Describe each :—Restigouche (*res-te-goo'sha*), Miramichi (*mir-a-me-she'*), St. John's, Exploits (*of Newfoundland*).

QUESTIONS ON MAP OF BRITISH PROVINCES,

PROMISCUOUSLY ARRANGED.

LESSON XXX.

I. Of what four provinces does Canada consist? *O, Q, N, B, and N. S.* Which of these provinces are separated by the Ottawa River? By the River Restigouche? Which is a peninsula? Which borders on the great lakes? Which lies on both sides of the St. Lawrence? Which borders on the Atlantic?

II. On what river is the capital of British America? Of what is the Ottawa a branch? What island is at the mouth of the St. Lawrence? What four states form part of the boundary of the province of Quebec? What lake extends from the United States into Ontario? What places are on the northern shore of Lake Ontario?

III. In what direction is Ottawa from Montreal? Montreal from Quebec? Quebec from Halifax? Halifax from New York? Of what province is Halifax the capital? What strait separates Cape Breton Island from Nova Scotia? Prince Edward Island from New Brunswick? Newfoundland from Labrador?

IV. What city is the metropolis of Canada? *M.* How far is Montreal from the Atlantic? *About 600 miles.* On what island is Montreal situated? Describe this island. *The Island of Montreal, 32 miles in length, lies at the junction of the Ottawa with the St. Lawrence.* What island lies north of the Island of Montreal? By what waters is the Isle of Jesus surrounded? What two places are opposite Montreal?

V. How is New Brunswick connected with Nova Scotia? *By a narrow isthmus.* What bay nearly separates these two provinces?



* The Richelieu River flows from Lake Champlain north into the St. Lawrence. This river, also the St. Francis and the Chaudière, can be seen drawn on a larger scale, on the map of the Eastern States.

What river crosses the western part of New Brunswick? What capital city is on this river? In what direction is Fredericton from Quebec? What is the most northerly town in New Brunswick?

VI. What river empties into the St. Lawrence about 120 miles below Quebec? For what is the Saguenay remarkable? *For its wild and beautiful scenery.* Of what lake is it the outlet? Does the St. Maurice River flow into the St. Lawrence above or below Quebec? On what waters would you sail in going from Quebec to Toronto? In going from Fredericton to Halifax?

VII. Of what lake is the Ottawa River the outlet? The French River? With what bay is this lake connected? Of what lake is Georgian Bay a branch? What river of Ontario flows into Lake Erie? In what direction is Hamilton from London? London from Montreal? London from Buffalo?

LESSON XXXI.

I. By what river are Lakes Erie and Ontario connected? In what direction does the Niagara River flow? What two places near this river are memorable for battles between the Americans and British in the war of 1812? *Queensdown and Chippewa.* What canal runs from Colborne to Port Dalhousie (*dah-hoo'se*)? *The Welland Canal.* What waters does this canal connect? Why is this canal necessary, when the Niagara River connects the same waters? What islands are in the Niagara River?



II. What is the most easterly part of continental British America called? What separates Labrador from the province of Quebec? Are there any cities in Labrador? *None; a few missionary settlements are maintained by the Moravians on the coast, for the instruction of the Esquimaux.* On what island is the western terminus of the Atlantic Telegraph? *N.* On what bay?

III. What lake is between the province of Ontario and Ohio? What place is on the Detroit River? On Lake Simcoe? At the west end of Lake Ontario? Is the St. Lawrence River the final outlet of all the lakes on the map? Mention the exceptions. What six rivers empty into James Bay?

IV. Which extends farther south, Ontario or Michigan? Nova Scotia or New Hampshire? New Brunswick or Quebec? Newfoundland or New Brunswick? Prince Edward Island or Cape Breton? What bay and river separate New Brunswick from the province of Quebec? What islands north-west of Cape Breton?

V. What bays indent the coast of Newfoundland? What river and lake are in Newfoundland? What places are on the coast of Nova Scotia? What, on the coast of New Brunswick? What capes are at the entrance of the Gulf of St. Lawrence? Mention the chief commercial cities of Canada. *T., K., M., and Q.*

BRITISH PROVINCES IN NORTH AMERICA.

LESSON XXXII.

DOMINION OF CANADA.

Geographical Position.—Canada is situated in the south-eastern part of British America, and embraces the provinces of Ontario, Quebec, New Brunswick, and Nova Scotia.

Government.—The affairs of Canada are regulated by a Governor-general appointed by the British crown, a Council selected by the Governor, and a Parliament consisting of a Senate and a House of Commons. The Senators are appointed for life by the Governor-general; the members of the House are elected by the people. Each province has, besides, a legislature of its own.

PROVINCE OF ONTARIO.

Geographical Position.—The Province of Ontario, formerly called Canada West, extends along the upper part of the River St. Lawrence, and the great lakes which separate British America from the United States.

Physical Features.—This province is traversed by ridges of table-land, not high enough to be called mountain ranges. The region between Georgian Bay and the upper part of the Ottawa River is considerably elevated.

Soil, etc.—The soil is generally fertile, though the climate is colder than that of European countries in the same latitude. Table fruits and various kinds of grain are among the chief productions. Wild animals, many of which are valuable for their fur, abound in the forests. Maple-trees are numerous, from which a considerable quantity of sugar is obtained.



MAKING MAPLE SUGAR IN CANADA.

Inhabitants, etc.—The inhabitants consist chiefly of settlers from Great Britain and the United States, with their descendants. Some native Indians yet remain on the shores of Lakes Huron and Superior. The prevailing religion is Protestantism.

Travelling Facilities.—The towns of the province are connected by good roads. Several lines of railway are completed; others are in progress.

Manufactures and Exports.—Manufactures are receiving considerable attention. Grain, flour, timber, pot and pearl ashes, furs, and fish, are exported.

Cities.—OTTAWA, on the right bank of the Ottawa River, at the entrance of the Rideau (*re-do'*) Canal, is the capital of British America.

KINGSTON, at the north-east extremity of Lake Ontario, is the great depot of government steamers, and of the boats employed on the Rideau

Canal. It has an excellent harbor, and is the naval arsenal of Great Britain in this quarter.

TORONTO, located on the northern shore of Lake Ontario, is extensively engaged in trade. HAMILTON, at the head of Lake Ontario, is an important commercial city. It is on the line of the Great Western Railroad, which extends across the province, from Niagara to the Detroit River.

PROVINCE OF QUEBEC.

Geographical Position.—The Province of Quebec, formerly called Canada East, extends in a north-easterly direction from the Ottawa River, which separates it from Ontario, to Labrador and the Gulf of St. Lawrence.

Physical Features.—The surface is diversified with hills, plains, and valleys.

Soil, etc.—In the extreme north, the soil is too barren for cultivation, but along the banks of the St. Lawrence it is quite fertile. The climate is very cold, for the latitude. The markets in winter present a strange appearance; every thing is frozen. The productions are like those of Ontario.

Natural Curiosities.—Eight miles from Quebec are the celebrated Falls of Montmorency. The Montmorency is a small river, which, in its onward course to the St. Lawrence, descends a precipice of about 250 feet.

These, and the Falls of Chaudière, in a river of the same name, 2½ miles above its mouth, are the chief natural curiosities belonging exclusively to Canada. It has, however, a share in the Falls of Niagara, the most stupendous cataract in the world.

Inhabitants.—A large proportion are French settlers and their descendants, who are engaged chiefly in agricultural pursuits and lumbering. Most of the inhabitants are Roman Catholics.

Travelling Facilities.—Good roads are found in the settled districts, and railroads connect the chief cities with those of the United States; but commerce is carried on mainly by means of lakes, rivers, and canals.

Manufactures and Exports.—Manufactures are rapidly increasing. The leading exports are timber, pot and pearl ashes, furs, and fish.

Cities.—QUEBEC, a strongly fortified city, styled "the Gibraltar of America," is situated partly on a plain, along the left bank of the St. Lawrence, and partly on a promontory 350 feet in height,—being thus divided into an Upper and a Lower Town. The principal buildings are in the upper and fortified part of the city. The harbor is accessible to ships of the line, and vessels of the largest burden can come up to the wharves.

"The Plains, or Heights of Abraham," is the name given to the entire promontory lying between the St. Charles and the St. Lawrence, at the eastern extremity of which the citadel of Quebec stands. This spot is memorable in history for the battle fought in 1759, which resulted in the fall of the two Generals— Wolfe and Montcalm.

MONTREAL, the chief emporium of trade between Canada and the United States, is situated on an island of the same name in the St. Lawrence River. It is well built, and contains many splendid public edifices; among these is a Roman Catholic cathedral, one of the finest buildings in North America. Its extensive wharves surpass those of any other city on the continent.

A tubular iron bridge, nearly two miles in length, crosses the St. Lawrence at this place.

THREE RIVERS, one of the oldest towns in Canada, lies on the left bank of the St. Lawrence, at the junction of the St. Maurice River. The St. Maurice divides into three channels at its mouth; hence the name of the town. Its inhabitants are mostly of French descent.

LESSON XXXIII.

PROVINCE OF NEW BRUNSWICK.

Geographical Position.—New Brunswick extends from the Restigouche River on the north, to the Bay of Fundy on the south, and from the Gulf of St. Lawrence and Northumberland Strait to the St. Croix (*kroï*) River.

Physical Features.—The surface is varied; in the eastern part it is generally level, but along the Bay of Fundy rocky and uneven. But a small portion has been cleared; the rest is covered with dense forests.

Soil, etc.—The soil is generally fertile. Potatoes are largely cultivated; manganese, iron, and coal abound. The fisheries are exceedingly valuable.

Inhabitants.—The inhabitants are of English and Irish descent, and for the most part Protestants.

Manufactures and Exports.—Manufactures are, of late, receiving attention. The chief employments are the timber-trade and the fisheries. The exports are timber, dried fish, gypsum, and grindstones.

Cities.—FREDERICTON, the capital, is on the right bank of the St. John's River. The streets are wide, and much space is devoted to garden-plots. St. John, the largest town, stands on a steep slope, separated by a projecting rock into two portions. Its fine harbor is defended by several forts.

PROVINCE OF NOVA SCOTIA.

Geographical Position.—Nova Scotia is a peninsula lying south-east of New Brunswick, with which it is connected by an isthmus 14 miles wide.

Physical Features.—The surface is diversified and well watered. The coasts contain many inlets, some of which form excellent harbors.

Soil, etc.—There are some highly fertile districts, but these are of limited extent; only a small part of the peninsula is under cultivation. The winters are very severe, the summers short and hot. Fogs are frequent along the coast. Grain and potatoes are the staple crops. The principal resources of the colony are the timber, plaster, and coal trade, and the fisheries.

Inhabitants, etc.—The population is composed mainly of European emigrants and their descendants. Protestantism is the prevailing religion.

Manufactures and Exports.—Little attention is given to manufactures. The leading exports are lumber, fish, coal, gypsum, grindstones, whale and seal oil, and furs.

Cities.—HALIFAX, the capital of Nova Scotia, is situated on the south-eastern coast. It possesses an extensive dock-yard, and is the principal naval station of Great Britain in North America.

LIVERPOOL, on the south-eastern coast, about 70 miles from Halifax, carries on a flourishing trade in lumber and fish.

THE ISLAND OF NEWFOUNDLAND.

Geographical Position.—This island, a colony of British America, lies south-east of Labrador, from which it is separated by the Strait of Belle Isle.

Physical Features.—The eastern part consists principally of low hills, the western is high and rocky. The interior is hilly, and is interspersed with small rivers and lakes.

Soil, etc.—The soil is ill-suited to agriculture, but pasturage is abundant. The climate in the winter is severe; and during a great part of the year fogs are prevalent. The fisheries are the chief reliance of the inhabitants. Cod are taken in great numbers by English, French, and American fishermen, on the celebrated Banks of Newfoundland, which lie in the Atlantic, south of the island, and are over 600 miles in length.

Inhabitants.—The inhabitants are chiefly Irish. The Roman Catholic religion prevails. The colony is ruled by a Governor appointed by the British crown, and a local legislature.

Manufactures and Exports.—The manufactures are limited to a few articles of warm woollen clothing. Ship-building is carried on to a small extent; but the materials are imported from New Brunswick. The exports are mainly the produce of the fisheries.

St. John's, the capital of the island, is on the south-eastern coast.

LABRADOR, a large peninsula, is included in the government of Newfoundland. Over a thousand vessels, from the neighboring provinces and

the United States, visit the eastern coast of Labrador every year, for the purpose of taking whales, cod, salmon, and herring, which there abound. The resident inhabitants are mainly fur-traders and seal-catchers. NAIN, a Moravian establishment, is the chief settlement.



CATCHING SEALS ON THE COAST OF LABRADOR.

THE ISLAND OF CAPE BRETON.

Geographical Position.—This island, a colony of Great Britain, lies north-east of Nova Scotia, of which province it forms a part.

Physical Features, etc.—The surface is broken, and the island is very irregularly shaped, being almost divided by an arm of the sea, called Bras d'Or (*brah dor*). The soil is fertile, and the climate less severe than on the main-land. Fish and coal are the chief exports.

Inhabitants.—The inhabitants are mostly emigrants from the Hebrides and their descendants. Fishing is the leading object of pursuit.

SYDNEY, the capital, is situated in the eastern part of the island, on Sydney Bay. In the vicinity are extensive beds of bituminous coal.

PRINCE EDWARD ISLAND.

Geographical Position.—This insular colony of Great Britain lies east of New Brunswick, and north of Nova Scotia.

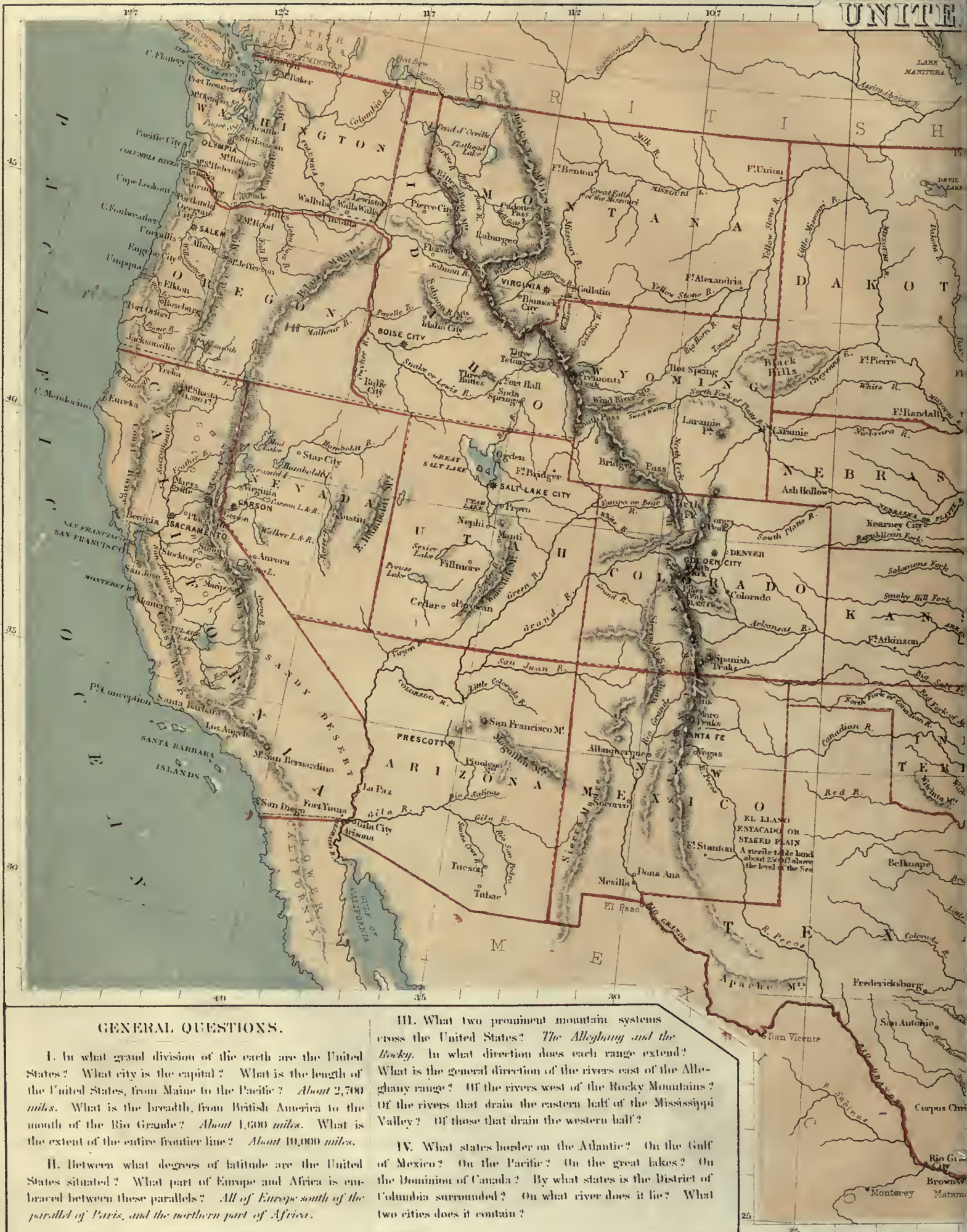
Physical Features, etc.—The surface is level and well watered; the soil is fertile. The pastures are rich, timber is abundant, and the fisheries are extensive. Excellent oysters are found on the coast.

Inhabitants, etc.—The inhabitants are chiefly of French and Scotch descent. The chief pursuit is agriculture; the principal exports are agricultural products, timber, dried and pickled fish.

CHARLOTTE TOWN, the capital, is situated near the southern coast. Many of the inhabitants are extensively engaged in ship-building.

BERMUDA, or SOMERS ISLES.—This group, consisting of about 300 small islands, belonging to Great Britain, is situated in the Atlantic Ocean, 600 miles east of South Carolina. Many of these isles are so small and barren that they have neither inhabitants nor name. The largest of the group is 20 miles long, and 2 in breadth. On the inhabited islands, fruits of both temperate and tropical regions are raised.

VANCOUVER ISLAND.—This island is separated from the main-land of British America by the Gulf of Georgia. Coal, limestone, and timber, are said to be abundant. The interior of the island is hilly, the soil well watered, and the coasts contain several good harbors. VICTORIA is the capital.



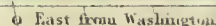
GENERAL QUESTIONS.

I. In what grand division of the earth are the United States? What city is the capital? What is the length of the United States, from Maine to the Pacific? *About 2,700 miles.* What is the breadth, from British America to the mouth of the Rio Grande? *About 1,600 miles.* What is the extent of the entire frontier line? *About 10,000 miles.*

II. Between what degrees of latitude are the United States situated? What part of Europe and Africa is embraced between these parallels? *All of Europe south of the parallel of Paris, and the northern part of Africa.*

III. What two prominent mountain systems cross the United States? *The Alleghany and the Rocky.* In what direction does each range extend? What is the general direction of the rivers east of the Alleghany range? Of the rivers west of the Rocky Mountains? Of the rivers that drain the eastern half of the Mississippi Valley? Of those that drain the western half?

IV. What states border on the Atlantic? On the Gulf of Mexico? On the Pacific? On the great lakes? On the Dominion of Canada? By what states is the District of Columbia surrounded? On what river does it lie? What two cities does it contain?



STUDIES ON THE MAP OF THE EASTERN STATES,

SYSTEMATICALLY ARRANGED.

LESSON XXXIV.

States.—Bound each:—Vermont, New Hampshire, Maine, Massachusetts, Rhode Island, and Connecticut.

Capital Cities.—State the situation of each:—Montpelier, Concord, Augusta, Boston, Providence, Newport, Hartford, and New Haven.

Important Places in Vermont.—State the situation of each:—St. Albans (*awl'banz*), Island Pond, Newbury, Norwich, Woodstock, Windsor, Bellows Falls, Brattleboro, Bennington, Rutland, Brandon, Middlebury, Vergennes, and Burlington.

Important Places in New Hampshire and Maine.—Lancaster, Colebrook, Dover, Portsmouth, Exeter, Manchester, Nashua, Keene, Lebanon, Hanover, Haverhill (*ha'ver-il*), Andover, Cal'ais, Eastport, Machias (*match-i-us*), Ellsworth, Bangor, Belfast, Waterville, Rockland, Thomaston, Gardiner, Bath, Brunswick, Lewiston, Portland, Saco (*saw'ko*), Biddeford, York, Bethel, Andover, Farmington, Norridgewock, and Dover.

LESSON XXXV.

Important Places in Massachusetts.—State the situation of each:—Williamstown, Greenfield, Lowell, Lawrence, Newburyport, Gloucester (*glos'ter*), Salem, Lynn, Charlestown, Roxbury, Plymouth, Barnstable, New Bedford, Fall River, Taunton, Worcester (*woos'ter*), Springfield, Sheffield, Pittsfield, and Northampton.

Important Places in Rhode Island and Connecticut.—Smithfield, Pawtucket, Bristol, Kingston, East Greenwich (*green'ich*), Salisbury (*sawlz'ber-e*), Windsor, Stafford, Stonington, New London, Norwich, Middletown, Bridgeport, Norwalk, Stamford, Danbury, Waterbury, and Litchfield.

Islands.—Describe each:—Moose, Mt. Desert, Fox, Nantucket, and Martha's Vineyard.

Capes.—Describe each:—Small Point, Elizabeth, Ann, and Cod.

Mountains.—Describe each:—Green, White, Washington, Wachusett (*waw-chu'set*), Holyoke (*hole'yoke*), and Tom.

LESSON XXXVI.

Bays.—Describe each:—Passamaquoddy, Machias, Penobscot, Casco, Massachusetts, Cape Cod, Buzzard's, and Narragansett.

Lakes.—Describe each:—Memphremagog, Eagle, Grand, Schoodic (*sko'o'dik*), Chesuncook, Pemadumcook, Moosehead, Umbagog, Sebago,* and Winnipiscogee (*win-ne-pe-sok'e*).

Rivers.—Describe each:—Otter, Winooski, Lamoille, Missis'que, St. Croix (*kroi*), W. Machias, Union, Penobscot, Mattawamkeag, Piscataquis, Kennebec, Sandy, Androscoggin, Saco, Piscataqua,† Salmon Falls, Merrimac, Pemigewasset (*pem-e-je-wos'set*), Winnipiscogee, Con'toocook, Nashua, Taunton, Blackstone‡ or Pawtucket, Thames, Quinebaug', Shetucket, Connecticut, Ashuelot (*ash'we-lot*), Miller's, White, West, Deerfield, Westfield, Farmington, and Housatonic (*hoo-sa-ton'ik*).

* The outlet of Sebago Lake is the Presumpsnet River.

† The Piscataqua is formed by the Salmon Falls and the Cocheco River.

‡ The Blackstone empties into the Providence River, which flows into Narragansett Bay.

QUESTIONS ON THE MAP OF THE EASTERN STATES,

PROMISCUOUSLY ARRANGED.

LESSON XXXVII.

I. Mention the Eastern States. By what other name are these states known? *The New England States*. What three Eastern States border on Canada? What three, on New York? What four, on the Atlantic? Which Eastern State borders on New Brunswick? Which, on Long Island Sound? Which, on Lake Champlain? Which has the greatest extent of coast on the Atlantic?

II. Of what state is Montpelier the capital? What is the most southerly place in Vermont, on the Connecticut? What is the largest place on Lake Champlain? *B*. How far is it from the capital of the state to Burlington? *About 40 miles by railroad*. What five towns in Vermont are on the Connecticut? What four, on Otter Creek? What river forms the boundary between Vermont and New Hampshire?

III. What city is the capital of New Hampshire? On what river? Sailing down the Merrimac from Concord, what important places would you find on the right bank? What, on the left? In what state is Newburyport? Mention the chief seaport of New Hampshire. What manufacturing city is about 12 miles north-west of Portsmouth? What manufacturing town is about the same distance from Portsmouth, south-west?

IV. Name the largest lake in New Hampshire. What rivers flow into the Merrimac below the Winnipiscogee? Among what mountains does the Saco River rise? In what lake, the Androscoggin? The Kennebec? Why is Augusta called the capital of Maine? What seaport is at the head of Penobscot Bay? What seaport is on the south-western side of that bay?

V. What do you suppose has made Portland the largest city in Maine? Mention the places on the Androscoggin River. On the Kennebec. What places are situated opposite to each other on the Saco? What seaport is situated on the easternmost frontier of the United States? *E*. On what island is it, and in what bay? What port is near the mouth of West Machias River?

LESSON XXXVIII.

I. What rivers flow into the Kennebec? What place is on the Sandy River? Mention the chief lakes of Maine. What bays indent the coast of Maine? What capes are near the entrance of Casco Bay? On what waters would you sail in going from Eastport to Boston? See scale of miles, and tell the direct distance between these places.

II. Of what state is Boston the capital? What important city in the vicinity of Boston? *C*. What manufacturing city is situated on the north-eastern shore of Massachusetts Bay? *L*. What commercial city a few miles north-east of Lynn? *S*. What noted manufacturing places are on the Merrimac, in Massachusetts? What, on the Taunton? *T*. and *F. R*.

III. What river crosses Massachusetts? What places in Massachusetts are on the Connecticut? What mountains are near the Connecticut? What bays indent the coast of Massachusetts? What capes on the coast? In what part of Massachusetts is Worcester? For what is it noted? *For its manufactures*. What is the largest manufacturing city in the western part of Massachusetts? *P*.

IV. What cities are alternately the capital of Rhode Island? What other state has two places where the legislature meet? What rivers cross Connecticut from north to south? In what state does the Connecticut rise? The Housatonic? What rivers form the Thames? What three states border on Connecticut? What two, on Rhode Island? What bays indent the coast of Massachusetts?

V. What city is situated on Buzzard's Bay? What manufacturing town a few miles north of Providence? On what river is it? What other town on this river, in Rhode Island? For what is Smithfield celebrated? *For its limestone quarries*. What city is at the head of navigation on the Thames? *N—h*. What city is near the mouth of the Thames?

VI. Mention the places in Connecticut, on Long Island Sound. On the Connecticut River. On the Thames. What three places lie near the western boundary of Connecticut? What two islands in the Atlantic, south-east of Buzzard's Bay? To what state do they belong? Of the Eastern States, which is the largest? Which, the smallest? Which extends farthest north? Which, farthest south?



Scale of Miles

STUDIES ON THE MAP OF THE MIDDLE STATES, MARYLAND, VIRGINIA, AND WEST VIRGINIA,

SYSTEMATICALLY ARRANGED.

LESSON XXXIX.

States.—Bound each:—New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, and West Virginia.

Capital Cities.—State the situation of each:—Albany, Trenton, Dover,* Harrisburg, Annapolis, Richmond, and Wheeling.

Important Places in New York.—State the situation of each:—Rochester, Oswego, Watertown, Ogdensburg, Plattsburg, Whitehall, Saratoga Springs, Schenectady, Troy, Hudson, Kingston, Poughkeepsie (*po-kip'se*), Newburg, West Point, Sing Sing, New York, Bing'hamton, Owego, Ithaca, Elmira, Bath, Olean (*o-le-an'*), Dunkirk, Buffalo, Lockport, Batavia, Geneseo, Geneva, Auburn, Syracuse,† Hamilton, Rome, Utica,—Brooklyn, Jamaica, Oyster Bay, Greenport, and Sag Harbor.

LESSON XL.

Important Places in New Jersey, Delaware, and Pennsylvania.—State the situation of each:—Paterson,‡ Jersey City,‡ Newark,‡ Elizabeth, New Brunswick, Atlantic City, Cape Island City, Vineland, Salem, Camden, Burlington, Princeton,—Wilmington, Smyrna, Milford, Lewes (*lu'is*), Georgetown.

Erie, Warren, Condersport (*kow'derz-port*), Athens, Carbondale, Seranton, Wilkesbarre (*wilks'bär-re*), Easton, Pottsville, Reading (*red'-ing*), Philadelphia, Lancaster, York, Carlisle, Washington, Pittsburgh, Alleghany, Newcastle, Meadville, Oil City, Williamsport, Danville, Lewiston, and Hollidaysburg.

Important Places in Maryland, Virginia, and West Virginia.—State the situation of each:—Cumberland, Hagerstown, Havre de Grace (*hav'er de grass*), Easton, Cambridge, Salisbury, Frederick, Baltimore,—Winchester, Alexandria, Fredericksburg, Petersburg, Portsmouth, Norfolk, Danville, Lynchburg, Salem, Abingdon, Jeffersonville, Staunton, Charlottesville,—Grafton, Romney, Martinsburg, Harper's Ferry, Beverly, Lewisburg, Princeton, Guyandotte (*ghi-an-dot'*), Charleston, Point Pleasant, Parkersburg, and Buckhannon.

Islands.—Describe each:—Long and Staten.§

Capes.—Sandy Hook, May, Henlopen, Charles, Henry,—and Montauk Point.

LESSON XLI.

Mountains.—Describe each:—Adirondack (*ad-e-ron'dak*), Catskill, Blue Ridge, and Alleghany.

Bays.—Describe each:—New York, Delaware, and Chesapeake.

Lakes.—Describe each:—Erie, Ontario, Seneca, Cayuga, Owaseo, Oneida, George, Champlain, Otse'go, and Chautauqua (*shä-taw'quä*).

Rivers of the Middle States.—Describe each:—Niagara, Genesee, Oswego,|| Seneca, Black, Oswegatchie, Racket, Saranac, Hudson, Mohawk,—Rar'itan,—Delaware, Lehigh, Schuylkill, Susquehanna, Chenango, Chemung, Conhocton, Tioga, West Branch of Susquehanna,

Juniata (*joo-ne-ah'tü*), Monongahela, Alleghany, Clarion, Conewango Creek, Oil Creek, and French Creek.

Rivers of Maryland, Virginia, and West Virginia.—Describe each:—Choptank, Patuxent, Potomac, Monoc'acy,—Shenando'ah, Rappahannock, Rapidan, York, Mattap'ony, Pamunky, James, Appomattox, Nottaway, Meherrin, Staunton, Dan,—Big Sandy, Guyandotte, Great Kanawha, Greenbrier, Gauley, Elk, and Little Kanawha.

QUESTIONS ON MAP OF THE MIDDLE STATES, ETC.,

PROMISCUOUSLY ARRANGED.

LESSON XLII.

I. Name the Northern or Middle States. *N. Y., N. J., D., and P.* To what division do Maryland, Virginia, and West Virginia belong? *To the Southern States.* What two Middle States border on Lake Erie? What three, on the Atlantic? What two islands, forming part of New York, border on the Atlantic? *L. and S.* What two states border on Delaware Bay? What two, on Chesapeake Bay?



II. What two cities in New Jersey are opposite New York? *H. and J. C.* What city on Long Island is opposite New York? Between what rivers is New York situated? *The Hudson and the East River.* What waters are connected by the East River? *Long Island Sound and N. Y. Bay.* What strait is south of N. Y. Bay? Describe Long Island Sound. How is Long Branch situated?

III. Which two Middle States have the most sea-coast? Which has no sea-coast? What capes are at the entrance of Chesapeake Bay? Of Delaware Bay? Name the principal places on Long Island. On the Hudson River. On the Mohawk. On the Delaware. On the Susquehanna. On the Potomac. On the James. On the Ohio, in West Virginia. Where is the Dismal Swamp?



IV. What is included in the city limits of Philadelphia? *The entire county, in which are several towns and villages.* Name some of these places. Between what two rivers is Philadelphia located? What city in N. Jersey is opposite Philadelphia? What two rivers form the Ohio? What city is at their junction? What ridges traverse part of Pennsylvania? What is the largest city in New Jersey? *N.* In Delaware? *W.* In Maryland? In Virginia? *R.* In West Virginia? *W.*

V. What rivers empty into Lake Ontario? Into the Alleghany River? Into the Susquehanna? Into the Delaware? Into the Potomac? Into Chesapeake Bay? Into the Ohio, from West Virginia? In what direction is Norfolk from Baltimore? From Petersburg? Which is the largest of the Middle States? Which the smallest?

* Dover is situated on Jones Creek.

† Syracuse is situated on Onondaga (*on-on-daw'ga*) Lake.

‡ See small Map of a Part of New York and New Jersey.

§ Staten Island is surrounded by New York Bay, the Narrows, and Staten Island Sound.

|| The Oswego is formed by the junction of the Seneca and the Oneida River.



STUDIES ON THE MAP OF THE SOUTHERN STATES, ARKANSAS, AND TENNESSEE,

SYSTEMATICALLY ARRANGED.

LESSON XLIII.

States.—Bound each :—Arkansas, Tennessee,*—North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas.†

Capital Cities.—State the situation of each :—Little Rock, Nashville, Raleigh, Columbia, Milledgeville, Tallahassee, Montgomery, Jackson, Baton Rouge (*bat'un roozh*), and Austin.

Important Places in Arkansas and Tennessee.—State the situation of each :—Fayetteville, Batesville, Hele'na, Arkansas, Napoleon, Columbia, Camden, Fulton, Fort Smith, Van Buren, Hot Springs, Pine Bluff,—Clarksville, Carthage, Knoxville, Greenville, Chattanooga, Fayetteville, Savannah. Jackson, Memphis, Trenton, Columbia, Murfreesboro, and Sparta.

Important Places in North and South Carolina.—State the situation of each :—Salem, Oxford, Halifax, Edenton, Washington, Goldsboro, Newbern, Beaufort (*bu'fart*), Wilmington, Fayetteville, Charlotte, Asheville, Salisbury (*sawlz'ber-e*).—Greenville, Yorkville, Cheraw, Georgetown, Charleston, Beaufort, Haniburg, Abbeville, and Camden.

LESSON XLIV.

Important Places in Georgia and Florida.—State the situation of each :—Rome, Dalton, Dalton's 'ga, Athens, Augusta, Savannah, Darien, Brunswick, St. Mary's, Thomasville, Albany, Oglethorpe, Columbus, West Point, La Grange (*lah-grang*), Atlanta, Marietta, Athens, Madison, Macon,—Jacksonville, St. Augustine, Platska, Tampa, St. Mark's, Apalachicola, Pensacola, and Key West.‡

Important Places in Alabama and Mississippi.—State the situation of each :—Tuscumbia, Florence, Decatur, Huntsville, Jacksonville, Tallade'ga, Tuske'gee, Enfaul'a, Greenville, Mobile, Gainesville, Tuscaloosa, Wetumpka, Selma, Marion, Cahawba, Camden,—Holly Springs, Oxford, Aberdeen, Columbus, Meridian, Mississippi City, Monticello, Woodville, Natchez, Grand Gulf, Vicksburg, Yazoo (*yah-zoo*) City, and Grenada.

* Arkansas and Tennessee are classed as Western States.

† See Texas, on the Map of the United States.

‡ Key West is situated on Key West Island, south of the mainland of Florida. It is the most populous place in the state.

LESSON XLV.

Important Places in Louisiana and Texas.—State the situation of each :—Shreveport, Monroe, Providence, Clinton, Port Hudson, Donaldsonville, New Orleans, Brashear, Opelousas, Natchitoches (*nak-e-tozh*), Alexandria,—Belknap,* Alton, Preston, Jefferson, Marshall, San Augustine, Galveston, Houston (*hue'stan*), Matagorda, Corpus Christi, Rio Grande City, San Antonio, Fredericksburg, Gonzales (*gon-zal'tez*), Washington, and Huntsville.

Islands.—Describe each :—Baha'na and Florida Reefs.

Capes.—Describe each :—Hatteras, Lookout, Fear, Canaveral, Sable, Romans, and St. Blas (*blahs*).

Mountains.—Describe each :—Cumberland,‡ Alleghany, and Blue Ridge.

Gulfs and Bays.—Describe each :—Tampa, Appalachee, Pensacola, Mobile, Atchafalaya (*atch-af-a-li'a*), and Corpus Christi.†

Sounds.—Describe each :—Albemarle and Pamlico.

Lakes.—Describe each :—St. Francis, George, Okeecho'-bee, Pontchartrain,§ and Borgne (*born*).

LESSON XLVI.

Rivers that flow toward the Atlantic.—Describe each :—Roanoke, Staunton, Dan, Neuse, Cape Fear, Haw, Deep, Great Pee Dee, Santee,|| Edisto, Savannah, Ogee'chee, Altamaha, Oco'nee, Oemulgee (*ok-mul'ghe*), St. Mary's, and St. John's.

Rivers that flow toward the Gulf of Mexico.—Describe each :—Pease, Suwanee (*su-waw'nee*), Allapahaw, Withlacoochee, Apalachicola, Flint, Chattahoochee, Choctawhatchee, Concehli (*ko-ne'-keh*), Perdido (*per-de-do*), Mobile,¶ Alabama, Coosa, Tallapoosa, Tombigbee, Black Warrior, Pascagoula, Chickasaw, Leaf, and Pearl.

Rivers that flow toward the Mississippi.**—Describe each :—Big Black, Yazoo, Tallahatchee, Yallabusha, Hatchee,

* For the remainder, see Texas, on the Map of the United States.

† For these mountains, see Map of the United States.

‡ See Texas, on the Map of the United States.

§ Lake Pontchartrain communicates with Lake Borgne by the Rigolets; Lake Borgne, which is really a bay, is a branch of the Gulf of Mexico.

¶ The Santee is formed by the Congaree and the Wateree. The Congaree is formed by the influence of the Broad and the Saluda. The Wateree is called the Catawba in the upper part of its course.

|| The Mobile is formed by the Alabama and the Tombigbee.

** The entire course of the Mississippi, the Arkansas, and the Red River, can be seen on the Map of the United States.

Tennessee,* Clinch, Holston (*hole'stan*), French Broad, Little Tennessee, Duck.

St. Francis, White, Black, Arkansas, Red, Washita (*wosh'e-taw*), Saline (*sa-leen*), Calcasieu (*kal'ka-shu*), Sabine † (*sa-been*), Nech'es, Trinity, Brazos (*brah-zos*), Little, Colorado, Guadalupe (*gaw-da-loop*), San Antonio, Nueces (*nue'es*), Rio Grande, and Puerco (*pwer'ko*).

QUESTIONS ON MAP OF SOUTHERN STATES, ETC.,

PROMISCUOUSLY ARRANGED.

LESSON XLVII.

I. Which states are usually called Southern States? *Ms., Va., W. Va., N. C., S. C., Ga., Fla., Ala., Miss., La., and Tex.* To what division do Arkansas and Tennessee belong? Of the Southern States, which border on the Atlantic? Which, on the Gulf of Mexico? Which, on Tennessee? Which, on Pennsylvania? *W. Va. and Md.*

II. What part of Georgia is mountainous? Of Alabama? Of North Carolina? What is the chief port on Albemarle Sound? What point is the most dangerous to navigators off the coast of North Carolina? *Cape H.* What three ports are on the coast of South Carolina?

III. What city is near the mouth of the Savannah? In what direction is New Orleans from Savannah? Montgomery from New Orleans? What river crosses the northern part of Alabama? From what state does the Mississippi River separate Mississippi? From what, Tennessee? From what, Arkansas?

IV. What rivers form the Santee? The Congaree? The Roanoke? The Altamaha? The Mobile? The Alabama? The Apalachicola? In what direction is Charleston from Newbern? From Chattanooga? From Pensacola? What lakes are in Florida? What is the Great Pee Dee called in the upper part of its course?

V. What places in Mississippi are on the Tombigbee? On the Pearl? On the Mississippi? What capital is in about the same latitude as Jackson? What river forms part of the boundary between Alabama and Florida? Between South Carolina and Georgia? Between Arkansas and Texas?

VI. Mention the rivers that flow into the Atlantic between the Savannah and the James. Mention those that empty into the Gulf of Mexico from Florida. From Louisiana. What city is the great metropolis of the South-west? *N. O.* What do you think has made it so?

VII. What mountains cross Tennessee? Name the principal places on the Tennessee River. On the Cumberland. On the Arkansas. On the Red. Name the chief rivers of Texas. (See Map of U. S.) Into what do they empty? What is the principal seaport of Texas? *Galveston, on Galveston Island.* Which is the largest of the Southern States. *Texas.* Which, the smallest? *Md.*

* The Tennessee is formed by the Clinch and the Holston.

† For the remainder, see Texas, on the Map of the United States.

SOUTHERN STATES
ARKANSAS & TENNESSEE



GULF OF MEXICO

Scale of Miles
0 20 40 60 80 100 120 140 160 180 200

Scale of Miles



STUDIES ON THE MAP OF THE WESTERN STATES,

SYSTEMATICALLY ARRANGED.

LESSON XLVIII.

States.—Bound each :—Minnesota, Wisconsin, Michigan, Ohio, Kentucky, Missouri, Iowa, Illinois, and Indiana.

Capital Cities.—State the situation of each :—St. Paul, Madison,* Lansing, Columbus, Frankfort, Jefferson City, Des Moines (*de moine*), Springfield, and Indianapolis.

Important Places in Minnesota, Wisconsin, and Michigan.—State the situation of each :—Fond du Lac, St. Anthony, Minneapolis, Shak'opee, Red Wing, Wabashaw (*waw'ba-shaw*), Faribault (*far-e-bo'*), Wino'na, Manka'to, Breckinridge, Crow Wing, St. Cloud, Monticello.

Superior, Green Bay, Appleton, Oshkosh, Fond du Lac, Sheboygan, Milwaukee, Wau'kesha, Racine (*ras-seen'*), Keno'sha, Beloit, Janesville, Mineral Point, Prairie du Chien (*pra're du sheen*), La Crosse, Galesville, Chippewa Falls, Grand Rapids.

Ontonag'on, Marquette (*mar-ke'*), Saut St. Mary (*soo sent ma're*), Saginaw, Corunna, Port Huron, Pontiac, Detroit, Ann Arbor, Ypsilan'ti, Monroe, A'drian, Jackson, Kalamazoo, Grand Rapids, Grand Haven.

LESSON XLIX.

Important Places in Ohio and Kentucky.—State the situation of each :—Toledo, Tiffin, Sandus'ky, Cleveland, Ravenna, Wooster, Canton, Steubenville, Zanesville, Marietta, Athens, Chillicothe, Portsmouth, Cincinnati, Dayton, Springfield, Bellefontaine, Lima, Mt. Vernon, Newark,—Padu'cah, Henderson, Owenboro, Hawesville, Louisville, Bardstown, Covington (*cuv'ing-tun*), Maysville, Pikeville, Barbourville, Glasgow, Russellville, Hickman, Danville, and Lexington.

Important Places in Missouri and Iowa.—State the situation of each :—Hannibal, Mexico, St. Charles, St. Louis, St. Genevieve (*jen-e-veev'*), Cape Girardeau (*je-rar-do'*), New Mad'rid, Hartville, Forsyth, Springfield, Carthage, Bolivar, Harrisonville, Independence, Lexington, Weston, St. Joseph, Glasgow, Boonville, Hermann.

Algo'na, Waverly, Cedar Falls, Dubuque (*du-booke'*), Cedar Rapids, Davenport, Iowa City, Muscatine, Fairfield, Burlington, Fort Madison, Ke'okuk, Ottumwa, Oskaloosa, Afton, Council Bluffs, Sioux (*soo*) City, Fort Dodge, and Boonesboro.

LESSON L.

Important Places in Illinois and Indiana.—State the situation of each :—Galena, Dixon, Rockford, Wauke'gan, Chicago, Jo'liet, Kankakee (*kan-kaw'ke*), Danville, Mt. Carmel, Shawneetown, Cairo (*ka'ro*), Kaskaskia, Salem, Illinois Town, Alton (*awl'tun*), Jacksonville, Quincy, Carthage, Rock Island, Peru, Lacon, Peoria, Bloomington, Decatur, Vandalia.

Michigan City, South Bend, Fort Wayne, Richmond, Lawrenceburg, Madison, New Albany, Evansville, Vincennes (*vin-senz'*), Terre Haute (*ter'reh hote*), La Fayette, Logansport, Crawfordsville, Greencastle, and Bloomington.

Islands.—Describe each :—Apostle, Royale (*roy'al*), and Beaver.

Bays.—Kewee'naw, Green, Grand Traverse, and Saginaw.

Strait.—Describe it :—Mack'inaw.

Lakes.—Describe each :—Traverse, Otter Tail, Red, Lake of the Woods, Rainy, Vermilion, Superior, Michigan, Winnebago, Houghton (*ho'tun*), Huron, St. Clair, Erie,* Itasca, Lecch, Mille-Lacs, Pepin (*pip'in*), Peoria, and Big Stone.

LESSON LI.

Rivers that flow toward the Great Lakes.—Describe each :—Red River of the North, Red Lake, Rainy Lake, St. Louis, St. Mary, Menom'onee, Fox, Wolf, St. Joseph's, Kalamazoo, Grand, Masko'gon, Manis'tee, Au Sable (*o sah'b'l*), Saginaw, Flint, St. Clair, Detroit,† Raisin, Manmee, St. Joseph's, St. Mary's, Sandusky, and Cuyahoga (*ki-a-ho'ga*).

Rivers that flow toward the Ohio.—Describe each :—Muskingum, Vernon, Scio'to, Miami (*me-ah'me*), Wabash (*waw'bash*), Sugar Creek, White, Tippecanoe, Embarras, Little Wabash, Big Sandy, Licking, Kentucky, Salt, Green, Cumberland, and Tennessee.‡

Rivers that flow toward the Mississippi.—Describe each :—Ohio,§ Big Muddy, Kaskaskia, Illinois, Kankakee, San'gamon, Salt Creek, Fox, Spoon, Rock, Wisconsin, Black, Chippewa, St. Croix, Rum,—Crow, Minnesota, Cannon, Root, Upper Iowa, Iowa, Red Cedar, Skunk, Des Moines, Raccoon, Salt, Missouri,† Chariton, Grand, Nodaway, Boyer, Little Sioux, Big Sioux, Osage', Gasconade, and Mar'amec.

QUESTIONS ON THE MAP OF THE WESTERN STATES,

PROMISCUOUSLY ARRANGED.

LESSON LII.

I. What states are classed as Western States? *Minnesota, Wisconsin, Michigan, Ohio, Kentucky, Tennessee, Arkansas, Missouri, Iowa, Illinois, Indiana, and all the states west of the Mississippi River except Louisiana and Texas.* What state borders on Lake Huron? What states border on Lake Superior? On Lake Michigan? On Lake Erie? On the east bank of the Mississippi? On the west bank? On the Ohio? What state has the greatest extent of lake coast?

II. What river separates West Virginia from Kentucky? Kentucky from Indiana? Kentucky from Missouri? Kentucky from Illinois? Iowa from Wisconsin? What lakes are in Minnesota? What lake is in Wisconsin? What mountain in Missouri? Where are the Pictured Rocks? Where is Mammoth Cave?

III. Name the principal places in Ohio, on Lake Erie. In Wisconsin, on Lake Michigan. In Illinois, on the Mississippi. In Iowa, on the Mississippi. In Indiana, on the Ohio. What place on the other side of the river is directly opposite St. Louis? Davenport? New Albany? Covington?

IV. Which of the rivers of Ohio belong to the basin of the St. Lawrence? *M., St. J., St. M., S., and C.* Which, to the basin of the Mississippi? Name the eastern branches of the Mississippi, north of the Ohio. The western branches, north of the Missouri. The southern branches of the Missouri, in Missouri.

V. What city is the metropolis of Ohio? *Ci.* Of Kentucky? *Lou.* Of Missouri? *St. L.* Of Wisconsin? *Mil.* Of Iowa? *Du.* Of Illinois? *Chi.* Of Michigan? *D.* What places in Iowa are on the Missouri River? What places in Missouri on that river? Name the principal places in Kentucky. Which is the largest of the Western States? *Cal.*

* The outlet of Lake Erie is the Niagara River.

† The Detroit River runs from Lake St. Clair to Lake Erie.

‡ See Map of the United States, for the entire course of this river.

§ The Ohio is formed by the Alleghany and Monongahela, in western Pennsylvania.

* Madison is situated on an isthmus between Lakes Mendota and Mono'na.

L



STUDIES ON THE MAP OF THE PACIFIC STATES, TERRITORIES, ETC.,

SYSTEMATICALLY ARRANGED.

LESSON LIII.

States.—Bound each :—Oregon, Nebraska, Kansas, California, and Nevada (*na-nah'dah*).

Territories.—Bound each :—Washington, Idaho, Montana (*mon-tah'nah*), Dakota, Indian, New Mexico, Arizona, Utah, Wyoming, and Colorado.

Capital Cities.—State the situation of each :—Salem, Lincoln, Topeka, Sacramento, Carson City, Olympia, Boise City, Virginia, Yankton, Tahlequah, Santa Fé, Prescott, Salt Lake City, and Golden City.

Important Places in Oregon, Nebraska, and Kansas.—State the situation of each :—Astoria, St. Helen's, Portland, Oregon, Umatilla, Port Orford, Roseburg, Elton, Umpqua City, Albany, Niobrara, Decatur, Omaha (*o'mah-haw*), Nebraska City, Atchison, Leavenworth, Wyandott, Lawrence, Humboldt, Fort Atkinson, and Fort Riley.

LESSON LIV.

Important Places in California and Nevada.—State the situation of each :—Eureka, Shasta, Nevada, Fort Yuma, San Diego (*sahn'de-a'go*), Los Angeles (*loce an'je-laz*), Santa Barbara, Monterey, San José, San Francisco, San Rafael, Benicia (*be-nish'e-a*), Marysville, Stockton, Mariposa, Virginia, Star City, Austin, and Aurora.

Important Places in the Territories.—State the situation of each :—Whatcom, Walla Walla (*wol'la*), Wallula, Cascade, Vancouver, Port Townsend, Stellacoom (*sti-la-koom*), Lewiston, Florence, Fort Hall, Ruby City, Idaho City, Fort Benton, Fort Alexandria, Gallatin, Bannock City, Fort Owen, Pem'bina, Renshaw, Flandreau (*flan-dro*), Taos (*tah'oce*), Mesilla (*ma-seel'yah*), Albuquerque (*ah-l-boo-ker'ka*), San Miguel (*sahn me-ghe'l*), Socorro, Tucson, Arizona, La Paz (*lah paz*), Ogden, Fillmore, Provo, Nephi, Manti, Fort Laramie, Denver, and Colorado.

LESSON LV.

Islands.—Describe them :—Santa Barbara.

Capes.—Describe each :—Pt. Conception, Mendocino, Disappointment, and Flattery.

Mountain Ranges, etc.—Describe each :—Cascade, Rocky, Bitter Root, Sierra Madre, Coast, Sierra Nevada, East Humboldt—Black Hills.—Mt. Shasta, Mt. Baker.—Fremont's Peak, Long's Peak, Pike's Peak, Spanish Peaks, Pilot Peak.—Three Buttes (*buttes*).

Strait, Sound, and Bay.—Describe each :—Juan de Fuca (*ho-ahn'da foo'kah*), Puget, San Francisco.

Lakes.—Describe each :—Flathead, Tulare (*too-tah'ra*), Klamath (*klahm'at*), Mud, Pyramid, Humboldt, Great Salt, and Utah.

LESSON LVI.

Rivers.—Describe each :—Red River of the North, Missouri,* Jefferson, Madison, Gallatin, Milk, Dakota, Big Sioux, Yellow Stone, Big Horn, Powder, Little Missouri, Cheyenne, White, Niobrara, Nebraska or Platte, North Fork, South Platte, Kansas, Republican Fork, Smoky Hill Fork.

Arkansas,* Neosho, Red Fork, Canadian, North Fork of Canadian,—False Washita,—Colorado, Green, Grand, Blue, San Juan, Gila, San Pedro (*sahn pa'dro*), Santa Cruz.

San Joaquin (*sahn ho-ah-keen*), Sacramento, Feather, Yuba,—Eel, Klamath, Umpqua;—Columbia, Clarke's, Snake or Lewis, Boise, Salmon, Clearwater, Malheur (*mal-oor*), John Day's, Fall, Willamette,—Humboldt,—and Sevier.

QUESTIONS ON MAP OF PACIFIC STATES, ETC., PROMISCUOUSLY ARRANGED.

LESSON LVII.

I. Name the territories of the U. S., and their capitals. Name the states represented on this map. To which division do these states belong? *The Western States.* Between what territories on the north and south do Kansas and Nebraska lie? What parallel of latitude is the boundary between these states? What capitals are on the Missouri River?

II. What river forms part of the southern boundary of Indian Territory? Of Washington? Of Dakota? What river forms part of the eastern boundary of Oregon? Of Kansas? What is the general direction of the rivers between the Rocky Mountains and the Mississippi? Why do they flow in this direction?

III. Following the southern boundary of British America, west from Lake Superior, what state and territories do you successively meet with? Following the northern boundary of Mexico, from Texas to the Pacific, what territories and state do you meet with? In what mountains do most of the rivers on the map rise?

* See Map of the United States.

IV. What states are traversed by the Coast Range? By the Sierra Nevada? What state and territory, by the Cascade Range? What territories, by the Rocky Mountains? What noted peaks in Colorado? In Idaho? What hills in south-western Dakota? What mountain in northern California? In the northern part of Washington? In the north-western part of Utah?

V. What part of California is a sandy desert? What river forms the south-eastern boundary of California? What islands off the south-western coast? What capes on the coast? What noted bay? Name the chief rivers of California. The largest lake. The principal mountain ranges. The places on the coast. The places in the interior. Which is the largest of all these places? *S. F.*

VI. Mention the principal seaports of Oregon. What is the general direction of the rivers of Oregon? What lake is in the southern part of Oregon? Which extends farther north, California or Kansas? California or Iowa? What tributary of the Missouri rises in British America? In Nebraska?

LESSON LVIII.

I. What point on the Missouri is the eastern terminus of the Pacific Railroad? *O.* What place on the Pacific coast is its western terminus? Through what states and territories does this railroad pass? What is the largest lake west of the Rocky Mountains? What capital on its shores?

II. What three rivers unite to form the Missouri? Name the three principal branches of the Missouri. *Y. S., N., and K.* Name some of the other branches of the Missouri. How long is the Missouri? *More than 3,000 miles.* What rivers unite to form the Colorado? Near what peak does the Yellow Stone rise?

III. What two rivers empty into San Francisco Bay? Name the principal branches of the Columbia. What places are on the Willamette River? On the Umpqua? On the Kansas? On the Rio Grande, in New Mexico? Of what is Carson the capital? Boise City? Virginia? Golden City? Name the principal places in Utah. In Nevada. In Colorado.

IV. Which of the territories extends farthest east? Which, farthest west? Which two, farthest south? In what direction is Great Salt Lake from Lake Tulare? From Fremont's Peak? From Olympia? From Santa Fé? From Omaha? What rivers cross Indian Territory? For what are most of the territories noted? *For their great mineral wealth.*

V. Of what is Olympia the capital? Yankton? Prescott? Name the rivers of Arizona. What city is the metropolis of the Pacific coast? What place in Iowa is opposite Omaha? What capes project from the coast of Washington? In what territory is the Cheyenne River? Fort Laramie? Fort Owen? Ruby City?

VI. In what part of Dakota are the principal settlements? In what part of Nevada? In what part of Colorado? In what part of Oregon? In what part of Montana? What has led to these settlements? being made in Montana, Colorado, and Nevada? Which territory contains the fewest settlements? Name the principal branches of the Arkansas. What territory do they traverse?

THE UNITED STATES.

LESSON LIX.

Area in square miles, 3,480,000. Population, 32,000,000.

CAPITAL CITY—WASHINGTON.



FLAG OF THE UNITED STATES.

Geographical Position.—The United States occupy the central part of North America, extending from the Atlantic to the Pacific, and from British America to the Gulf of Mexico and Mexico.

Extent of Coast.—The shore on the Atlantic, including indentations, measures 6,186 miles, on the Gulf of Mexico 3,467 miles, and on the Pacific 2,281 miles. The shore-line of the great northern lakes is about 3,600 miles.

Comparative Size.—The United States are nearly ten times as large as Great Britain and France combined; and only about one-tenth smaller than the whole of Europe.

Physical Features.—The surface is divided by the Alleghany and the Rocky Mountains, into three principal sections; the Atlantic or Alleghany Slope, the Pacific or Rocky Mountain Slope, and the Mississippi Valley.

Inhabitants, etc.—The inhabitants consist of Whites, Negroes, and Indians. The Negroes number about 4,500,000; the Indians, about 400,000. There is no established church; all sects are tolerated, and all have equal privileges.—No other country has increased in population so rapidly and steadily as the United States.

History.—The first permanent English settlement was made at Jamestown, Virginia, in 1607. In 1775, there were thirteen colonies, with a population of nearly three millions. The inhabitants, feeling aggrieved by the injustice of the British Parliament in taxing them without their consent, determined to throw off allegiance to the mother country. Accordingly, on the 4th of July, 1776, they declared their independence. This gave rise to a seven years' war, which resulted in the acknowledgment of the independence of the colonies by the British Government in 1783.

The present Constitution was ratified in 1788.

Government.—The government is a federal democratic republic. The legislative or law-making power is vested in Congress, which consists of a Senate and a House of Representatives. This body meets at Washington, on the first Monday in December.

The Senate is composed of two members from each state, elected by the Legislatures of the same for six years. The members of the House of Representatives are chosen by the people of the several states every second year. Each state is entitled to one Representative for every 127,000 inhabitants.

Each territory may send one delegate to Congress, who has the right to debate on matters pertaining to his territory, but cannot vote.

The executive power is vested in a President, who, with a Vice-President, is elected every four years by Electors chosen either by the people or by the state Legislatures. The President is commander-in-chief of the army and navy. With the concurrence of the Senate, he makes treaties, appoints civil and military officers, levies war, concludes peace, etc.

The judicial power is vested in a Supreme Court, which sits once a year at Washington. Each state has its own separate government, consisting of a Senate and a House of Assembly, a Governor, etc., who regulate all affairs except such as belong to the general government. The states are for the most part divided into counties, and the counties into townships.

How divided.—The United States comprise thirty-seven states, ten territories, and one district. The states are divided into four sections; the Eastern or New England, the Northern or Middle, the Southern, and the Western.

THE STATE OF VERMONT.

Geographical Position.—This state, the most north-westerly of the New England section, lies between New York and New Hampshire.

Physical Features.—The surface is generally mountainous and well wooded. The Green Mountains traverse the state from north to south. Hence the name of Vermont, *vert* in French signifying green, and *mont* mountain.

Soil, etc.—The soil in the valleys is fertile, and the hills afford excellent pasturage. The climate is cold, but healthy. The staples are wheat, butter, cheese, wool, maple sugar, and live-stock. Iron, marble, slate, and granite, are the chief mineral products.

Natural Curiosities.—The most noted natural curiosities are Bellows Falls, on the Connecticut, and Great Falls, on the Lamoille River.

Inhabitants, etc.—This state was settled by the English. The soldiers of Vermont bore a conspicuous part in the Revolution, and were known as "Green Mountain Boys." Agriculture is the leading pursuit.

Manufactures and Exports.—Manufactures are not extensive. Mineral products, lumber, live-stock, cheese, pot and pearl ashes, and maple sugar, are exported.

Towns.—MONTPELIER, the capital, on the Winooski or Onion River, carries on an active trade. BURLINGTON, the most populous and commercial town in the state, is finely situated on a branch of Lake Champlain. It is the seat of the University of Vermont. WINDSOR and BRATTLEBORO lie on the Connecticut; the former is noted for its fine site and beautiful scenery, the latter for its manufactures. RUTLAND is an active business center.

BENNINGTON, in the south-western corner of the state, is memorable for the battle fought there in 1777, in which a detachment of Burgoyne's army was defeated by General Stark. MIDDLEBURY, an important manufacturing town on Otter Creek, is the seat of Middlebury College. Marble is obtained in great quantities from a quarry near the town.

NEW HAMPSHIRE.

Geographical Position.—This state lies between Maine and Vermont, and extends from Canada to Massachusetts.

Physical Features.—The surface is hilly and mountainous, except in the south-eastern part, which is either level or gently undulating. New Hampshire has only 18 miles of sea-coast, and but one good harbor.

The White Mountains proper extend no more than 20 miles, but detached groups of the chain stretch as far south as Connecticut. Mount Washington is the loftiest peak, and the Notch, where the Saco River makes its way through the mountains, is an object of great interest to tourists. On account of its magnificent scenery, New Hampshire is often styled "the Switzerland of America."



LAKE WINNIPISEOGEE, N. H.

Soil, etc.—The soil is not generally fertile, but the hills afford very fine pasturage. The climate is severe, yet healthy. The chief productions are grain, potatoes, butter, cheese, wool, maple sugar, bees'-wax, and honey.

Granite abounds, and hence New Hampshire is called "the Granite State." Iron is also found.

Inhabitants, etc.—The inhabitants are chiefly of English descent. The first settlements were made near Portsmouth, in 1623. The leading industrial pursuits are agriculture, manufactures, and lumbering.

Manufactures and Exports.—Manufactures are extensive, chiefly cotton and woolen goods, leather, and iron. The principal exports are lumber, live-stock, wool, fish, pot and pearl ashes, and granite.

Cities, etc.—CONCORD, the capital of the state and a great railroad center, lies on the right bank of the Merrimac. MANCHESTER, on the left bank of the Merrimac, the most important city of the state, is noted for its manufactures; as, also, are NASHUA and EXETER. HANOVER, near the Connecticut, is the seat of Dartmouth College.

DOVER, the oldest town in the state, on the Coheco River, carries on extensive cotton manufactures. PORTSMOUTH, the only seaport of New Hampshire, is built on a beautiful peninsula, on the right bank of the Piscataqua, three miles from the ocean.



MT. KATAHDIN, MAINE (THE LOFTIEST SUMMIT IN THE STATE).

LESSON LX.

THE STATE OF MAINE.

Geographical Position.—Maine, the most north-easterly state in the Union, lies between New Brunswick and New Hampshire, and extends from Canada to the Atlantic. It has a sea-coast of 1,000 miles.

Physical Features.—Maine contains numerous detached elevations, but no mountain range. It abounds in lakes; nearly one-tenth of its surface is covered with water.

Soil, etc.—The soil is best adapted to grazing. The most fertile portions lie in the valley of the St. John's, and between the Penobscot and the Kennebec. The climate is subject to great extremes of heat and cold; the winters are long and severe. Among the most important productions are grain, potatoes, wool, butter, cheese, bees'-wax, and honey. The great staple is lumber. The chief minerals are iron, limestone, granite, and slate.

Inhabitants, etc.—The inhabitants are mainly of British descent. A few Indians still inhabit some of the islands in the Penobscot. The chief pursuits are agriculture, lumbering, the coasting trade, and the fisheries. From its abundance of suitable timber, Maine has become the greatest ship-building state in the Union.

Manufactures and Exports.—Maine is not so largely engaged in manufactures as some others of the Eastern States. The fisheries are extensive. Fish, lumber, butter, cheese, lime, marble, granite, and ice, are the chief exports.

Cities, etc.—AUGUSTA, the capital, is situated on the Kennebec, which is here crossed by a bridge. PORTLAND, the first city in the state in population, wealth, and commerce, stands at the west end of Casco Bay.

BANGOR, on the right bank of the Penobscot, is the greatest lumber depot in the world. EASTPORT, on Moose Island, is also an important lumber depot.

BELFAST, a seaport town, is largely engaged in ship-building, commerce, and the fisheries. BATH, on the right bank of the Kennebec, ranks seventh among the cities of the U. S. in the importance of its shipping.

MASSACHUSETTS.

Geographical Position.—This state extends from New York on the west, to the Atlantic Ocean on the east.

Physical Features.—The north-eastern and middle portions are hilly; the south-eastern, level and sandy; the western, mountainous. Two ridges of the Green Mountain Range from Vermont traverse the state, and furnish an abundance of picturesque scenery.

Soil, etc.—The soil, though not generally favorable to agriculture, yet by the industry of the inhabitants, has been made to yield a rich return. The most fertile portions are the valleys of the Connecticut and the Housatonic. The climate is severe in winter; the summers are exceedingly pleasant. The chief products are Indian corn, oats, potatoes, butter, and cheese. Sienite, granite, marble, and limestone, are the most abundant minerals.

Natural Curiosities.—Among these may be mentioned the Natural Bridge on Hudson's Brook; the Ice Hole in Stockbridge, a deep, romantic ravine, where ice remains the year round; and an immense rock, of 40 tons, in the village of New Marlborough, so nicely balanced that a finger can move it.

Inhabitants, etc.—This state was first settled at Plymouth, December 20th, 1620, by a company of English Puritans, whom religious persecution had driven to Holland. The leading pursuits are commerce, manufactures, and the fisheries. In commerce, this state ranks second only to New York.

Manufactures and Exports.—In manufactures, Massachusetts exceeds every other state in the Union. It produces cotton and woolen goods, leather, boots and shoes, woodenware, tinware, paper, carpeting, etc. These, with granite, marble, ice, whale-oil, and fish, are the principal exports.

Cities.—BOSTON, the capital, is the great metropolis of New England, and the second commercial city in the Union. It stands at the head of Massachusetts Bay, near the confluence of the Charles and the Mystic River. Its wharves and warehouses are on a scale of magnitude surpassed by no other city of equal population.

CAMBRIDGE and CHARLESTOWN are connected with Boston by bridges. The former is the seat of Harvard University; the latter contains the celebrated Bunker Hill Monument, erected on the site of the battle-field.

SPRINGFIELD, a flourishing city on the Connecticut, contains a U. S. Arsenal. WORCESTER, an important railroad center, lies in a valley surrounded by beautiful hills. LOWELL and LAWRENCE are celebrated for the amount and variety of their manufactures. LYNN is noted for the manufacture of shoes.

SALEM has a good harbor, and is extensively engaged in commerce. NEW BEDFORD, on a branch of Buzzard's Bay, has more tonnage employed in the whale fishery than any other port in the Union.

NANTUCKET AND MARTHA'S VINEYARD.—These islands, forming part of Massachusetts, are separated from the main-land by Vineyard and Nantucket Sound. The inhabitants are largely engaged in the whale fishery.

RHODE ISLAND.

Geographical Position.—This state lies south and west of Massachusetts.

Physical Features.—On the coast it is level, but in the west hilly. Numerous small streams afford water-power for manufacturing purposes.

Soil, etc.—Along the bay, and on the islands, the soil is fertile. Rhode Island is noted for fine cattle, apples, and butter. Coal, iron, limestone, and marble, are found to some extent.

Inhabitants, etc.—The inhabitants are chiefly of British descent. The first settlement was made at Providence, in 1636, by Roger Williams. The

leading objects of pursuit are manufactures, commerce, cattle-rearing, and the dairy.

Manufactures and Exports.—Rhode Island, in proportion to population, ranks first among the United States in cotton, and second in woolen, manufactures. These, with cattle, butter, cheese, and apples, are the chief exports.

Cities, etc.—PROVIDENCE and NEWPORT are the capitals. The former, on an arm of Narragansett Bay, is the largest city in the state; it is extensively engaged in commerce and manufactures, and is distinguished for its educational institutions.



FORT DUMPLINGS, NEWPORT, R. I.

Newport is situated on Rhode Island, a beautiful island in Narragansett Bay, from which the state received its name. Newport is one of the most celebrated watering-places in the Union; its harbor is among the best on the coast of the United States.

PAWTUCKET is noted for the manufacture of cotton goods and machinery; BRISTOL, for its good harbor and coasting-trade.

LESSON LXI.

THE STATE OF CONNECTICUT.

Geographical Position.—Connecticut, the most south-westerly of the New England States, lies between New York and Rhode Island.

Physical Features.—Much of the surface is hilly. The state is crossed by a succession of groups and eminences. There is an abundance of water-power, though but few of the rivers are navigable.

Soil, etc.—The soil is fertile, and in the eastern part is best adapted to grazing. The climate, though subject to sudden changes, is remarkably healthy. The chief productions are Indian corn, oats, potatoes, butter, cheese, and live-stock. The principal minerals are iron, copper, lead, and marble.

Inhabitants, etc.—The inhabitants are mainly of British origin. The chief pursuits are agriculture, manufactures, and the whale-fishery.

Manufactures and Exports.—The manufactures are varied and extensive, consisting of wooden, copper, iron, tin, and brass ware; hats, shoes, coaches, a variety of hardware, combs, buttons, etc. These constitute the principal exports. The foreign commerce of the state is carried on mainly through the ports of Boston and New York.

Cities.—HARTFORD and NEW HAVEN are the capitals. At the former, Trinity Collège is located. New Haven, on a branch of Long Island Sound, is one of the handsomest cities in the Union, and the seat of Yale Collège. It is known as "the City of Elms."

NORWICH, on the Thames, and BRIDGEPORT, on an arm of Long Island Sound, are extensively engaged in manufactures. NEW LONDON, on the Thames, three miles from its entrance into the Sound, has a fine harbor, and sends out numerous whalers. MIDDLETOWN, at the head of ship navigation on the Connecticut, is the seat of Wesleyan University.



THE FALLS AT NORWICH.

NEW YORK.

Geographical Position.—New York, the most northerly of the Middle States, lies directly west of New England.

Physical Features.—New York presents a great variety of surface. The eastern part of the state is traversed by the Adirondack, Catskill, and Shawangunk (*shong'gum*) Mountains. The western part is generally level or undulating.

Soil, etc.—The soil is various. The most fertile districts are in the western part, and the valleys of the Hudson and the Mohawk. The winter is long and severe in the north, but is much milder in the south-eastern part.

Wheat is the staple. The other important products are oats, potatoes, buckwheat, rye, barley, grass-seeds, orchard products, maple sugar, bees'-wax, honey, dairy produce, wool, and live-stock. Iron ore is abundant, and salt springs are numerous. Valuable mineral deposits are found.

Natural Curiosities.—The Falls of Niagara, in a river of the same name, are about 22 miles below Lake Erie, and 14 miles above Lake Ontario. The mighty volume of water which is the outlet of the great lakes, is here precipitated over a ledge of rocks 160 feet in height, forming the grandest cataract in the world. The Cohoes Falls, in the Mohawk, about two miles above its mouth, are exceedingly romantic. The Genesee Falls are in a river of the same name, at Rochester. The Catskill Falls, 180 feet high, and Trenton Falls, in West Canada Creek, are objects of great interest.

Inhabitants, etc.—The Hudson River was discovered by Henry Hudson in the year 1609; the first permanent settlements were made by the Dutch at Fort Orange, now Albany, and New Amsterdam, now called New York City. The inhabitants consist chiefly of Europeans and their descendants. The leading pursuits are commerce, agriculture, and manufactures. In commerce and agriculture this state ranks the first in the Union.

Manufactures and Exports.—Though New York is largely engaged in manufactures, she does not equal some of her sister states in this respect. The exports consist mainly of domestic produce.

Cities.—ALBANY, the capital, stands on the right bank of the Hudson, 145 miles from New York City, in a favorable position for trade, being connected by the Erie Canal with the great western lakes, and by the Hudson with the ocean. Troy, six miles north of Albany, lies on the left bank of the Hudson. The transshipment of goods, and manufacture of machinery, nails, stoves, cars, etc., form the principal business of the place.

NEW YORK, the chief commercial emporium of the New World, is situated on Manhattan Island, at the confluence of the Hudson and the East River, about 18 miles from the Atlantic Ocean. The island is $13\frac{1}{2}$ miles in length, and its greatest breadth is a little over 2 miles. The wharves on both sides are crowded with the vessels of all nations. New York contains a great number of imposing public edifices. It is abundantly supplied with water brought from the Croton River, a distance of over 40 miles, by means of an aqueduct which cost \$9,000,000.

ROCHESTER, on both sides of the Genesee, not far from Lake Ontario, has an almost unlimited water-power, which is extensively used by flouring-mills and other manufacturing establishments. OSWEGO is largely engaged in trade with Canada.

BUFFALO is the great entrepôt between the northwest and the states of the Atlantic sea-board. SYRACUSE is the seat of the most valuable salt manufactories in the United States. Utica, on the Mohawk, and Poughkeepsie, on the east bank of the Hudson, midway between Albany and New York, are important trading and manufacturing places.

LONG ISLAND.—This island, forming a part of the state of New York, is separated from the main-land by a strait called the East River, and by Long Island Sound.

Physical Features, etc.—A ridge, nowhere exceeding 300 feet in height, traverses the island from east to west. Long Island is important for its

market products; the numerous bays that indent the coast abound in fine fish, oysters, and clams.

Cities.—**BROOKLYN**, the principal seaport on the island and third city in the Union in population, is situated at its western extremity, opposite New York City. It is finely built and contains a U. S. Navy Yard.

STATEN ISLAND.—This island, forming a part of the state of New York, lies in New York Bay, about six miles south-west of New York City.

Physical Features, etc.—The northern part of the island, called Richmond Hill, is elevated about 300 feet above the ocean. The villages along the shores contain many splendid country-seats of New York citizens. The fisheries on the coast are very valuable.

LESSON LXII.

THE STATE OF NEW JERSEY.

Geographical Position.—New Jersey occupies a peninsula, situated south of New York and east of Pennsylvania.

Physical Features.—In the central and northern parts, it is undulating, hilly, or mountainous. The entire eastern coast, from Sandy Hook to Cape May, is sandy, and broken here and there by small inlets.

Soil, etc.—In the north, the soil is well adapted both to tillage and pasturage. The central and southern sections of the state are light and sandy. The climate is somewhat milder than that of New York. The chief productions are grain, orchard and market products, butter, cheese, cider, and live-stock. The principal minerals are bog-iron ore, zinc, and marl.



LONG BRANCH, NEW JERSEY.

Natural Curiosities.—The Passaic Falls, in a river of the same name, near Paterson, are about 70 feet in height. The scenery in the vicinity is remarkably picturesque.

Inhabitants, etc.—This state was first settled by the Dutch, at Bergen, in 1614, and the present population embraces many of their descendants. The chief pursuits are agriculture, manufactures, and mining.

Manufactures and Exports.—The manufactures are varied and important; among them are cotton, wool, iron, paper, leather, brick, glass, and earthenware. The leading exports are orchard and market products, and leather.

Cities.—**TRENTON**, the capital, has abundant water-power from the Falls of the Delaware, and is becoming one of the first manufacturing places in the state. **NEWARK** is the largest and most flourishing city. It is extensively engaged in the manufacture of paper-hangings, clothing, carriages, etc. **PATERSON** ranks next to Newark in population and manufactures.

JERSEY CITY, situated opposite to New York, and **NEW BRUNSWICK**, on the Raritan, have considerable trade and manufactures. The former is one of the greatest thoroughfares of travel in the Union; the latter is the seat of Rutgers College. **CAPE ISLAND CITY**, on Cape Island, is one of the most

celebrated watering-places in the United States; as also is **ATLANTIC CITY**, which lies in the south-eastern part of the state, and is connected with Camden by railroad.

DELAWARE.

Geographical Position.—Delaware, the smallest state in the Union except Rhode Island, lies south-west of New Jersey.

Physical Features.—It is generally level, but in the northern part somewhat hilly. There are no mountains in the state.

Soil, etc.—In the north, and along the shore of Delaware Bay, the soil is rich; in the southern part, it is light and sandy. The climate is generally mild, and highly favorable to agricultural pursuits. The staple productions are wheat, Indian corn, and butter. Bog-iron, and a fine sand suitable for the manufacture of glass, are the most important mineral products.

Inhabitants, etc.—This state was first settled in 1627, by the Swedes and Finns. About one-fourth of the present inhabitants are colored. Manufactures and agriculture form the leading pursuits.

Manufactures and Exports.—The manufactures of powder, paper, flour, and cotton, are very extensive. The exports consist chiefly of flour, lumber, sand for the manufacture of glass, and great quantities of peaches.

Cities, etc.—**DOVER**, the capital, situated on Jones Creek, carries on a considerable trade with Philadelphia, mainly in flour.

WILMINGTON, the most populous city in the state, is noted for its manufactures, and contains a U. S. Arsenal. **NEWARK** is the seat of Delaware College. **LEWES**, on Delaware Bay, is a place of resort during the bathing season. It lies opposite the Delaware Breakwater, which was constructed at an expense of over \$2,000,000, as a shelter for shipping in bad weather.

PENNSYLVANIA.

Geographical Position.—This state lies south of New York, and west of New Jersey, from which it is separated by the Delaware.

Physical Features.—The great Alleghanian Chain, which passes through this state in several ridges, forms naturally three distinct regions; viz., the eastern, or Atlantic slope; the western table-land, declining toward the Ohio; and the mountainous region of the center.

Soil, etc.—The soil is generally good, particularly in the valleys. The climate, though changeable, is exceedingly healthy. Among the varied productions of this state may be mentioned grain, orchard fruits, potatoes, butter, wool, and live-stock. Pennsylvania stands first among the states in abundance of coal, iron, and petroleum.

Inhabitants, etc.—The territory of Pennsylvania was granted to William Penn, a celebrated English Friend, who made his first settlement in 1682, where Philadelphia now stands. The population afterward received numerous additions of Germans and Irish. The leading pursuits are agriculture, mining, and manufactures.

Manufactures and Exports.—Pennsylvania ranks fourth among the states of the Union in foreign commerce, and among the first in extent and variety of manufactures. Her exports consist mainly of flour, Indian corn, lard, butter, coal, iron, and petroleum.

Cities, etc.—**HARRISBURG**, the capital, is delightfully situated on the east bank of the Susquehanna, and contains many handsome public buildings.

PHILADELPHIA, the metropolis of Pennsylvania, stands between the Delaware and the Schuylkill River, five miles above their confluence. It is remarkable for the regularity and cleanliness of its streets, the neatness of its dwellings, and the excellence of its benevolent and educational institutions. The commerce and manufactures of Philadelphia are very extensive.

EASTON, situated at the junction of several canals, is the seat of extensive manufactories, and a large inland trade between the coal and iron regions and the eastern markets. **LANCASTER**, a place of considerable trade, is in the heart of a very fertile and highly cultivated region. **READING** is the third city in the state in population and manufactures. **ERIE**, on Lake Erie, has an excellent harbor.

PITTSBURGH is situated at the junction of the Alleghany and the Monongahela, which here unite to form the Ohio. Its commerce is large, and its manufactures are more extensive than those of any other city in the state except Philadelphia.



THE JUNIATA RIVER, PENNSYLVANIA.

MARYLAND.

Geographical Position.—Maryland, the most north-easterly of the Southern States, is situated south of Pennsylvania.

Physical Features.—Maryland includes three distinct regions:—1. The Eastern Shore, which lies east of the Susquehanna River and Chesapeake Bay; 2. The part between Chesapeake Bay and the Potomac; 3. The mountainous district of the north-west. The surface along the bay is level.

Soil, etc.—The soil in the valleys of the northern and middle parts, is highly fertile; that of the eastern, and part of the western shore, is less so. The climate in the north is healthy and pleasant; in the south the winters are milder, but the summers are hot, moist, and unhealthy. The staples are tobacco, wheat, and Indian corn. The mineral products are iron and coal.

Inhabitants, etc.—The first settlers were English. Agriculture, commerce, and manufactures, engage the attention of the people.

Manufactures and Exports.—Among the leading manufactures are cotton and woolen goods, iron, leather, glass, shot, and powder. The chief articles of foreign export are flour, grain, pork, and tobacco.

Cities, etc.—ANNAPOLIS, the capital, about three miles from Chesapeake Bay, contains a United States Naval Academy, and a State House in which the old Continental Congress held some of its sessions.

BALTIMORE, the metropolis of the state, on a bay which sets up from the Patapsco River, is pleasantly situated and regularly laid out. It is ornamented with numerous monuments, and is therefore called "the Monumental City." It is distinguished for being the greatest market for tobacco in the United States, and the principal flour market in the world. CUMBERLAND stands next to Baltimore in population, and is noted for its trade in coal. FREDERICK CITY ranks third in population, and second in wealth and commercial importance. HAGERSTOWN has considerable trade.

LESSON LXIII.

THE STATE OF VIRGINIA.

Geographical Position.—Virginia lies south of West Virginia and Maryland, and north of Tennessee and North Carolina.

Physical Features.—It is divided into three sections:—1. The tide-water district, bordering on Chesapeake Bay and the Atlantic; 2. The Piedmont (*peed' mont*) district, extending from the head of tide-water on the rivers, westward to the Blue Ridge; 3. The valley between the Blue Ridge and the Alleghanies.

Soil, etc.—In the tide-water district, the soil is poor, except along the rivers; the Piedmont section is well adapted to the growth of Indian corn, tobacco, and cotton; the valley district is generally fertile.

Along the coast the climate is hot and moist, while it is cool and healthy in the mountain districts. The staple products are wheat, corn, flax, livestock, and tobacco. Coal and iron are abundant; salt and sulphur springs are numerous.

Natural Curiosities.—The Natural Bridge, over Cedar Creek, near its junction with the James River, about 120 miles west of Richmond, is one of the greatest natural curiosities in the world. This bridge of limestone rock spans a chasm 90 feet in width, at an elevation of 215 feet above the creek. Wier's Cave, about 18 miles north-east of Staunton, is also a noted natural curiosity. It extends 2,500 feet into the ground, and contains about 20 large rooms, besides numerous passages and galleries.

Inhabitants, etc.—Virginia was first settled by the English, from whom the present inhabitants have mainly descended. The first permanent English settlement in our country was made at Jamestown, 30 miles above the mouth of the James River, in 1607. The leading pursuit is agriculture.

Manufactures and Exports.—This state is not noted for manufactures. Its principal exports are tobacco, flax, corn, flour, and oysters.

Cities, etc.—RICHMOND, the capital of Virginia, on the James, is built on several hills which command a prospect of great beauty and grandeur. This city has an abundance of water-power, which is used for the manufacture of flour, tobacco, cotton, and ironware.

NORFOLK, on the Elizabeth River, eight miles above its entrance into Hampton Roads, is the chief commercial port of Virginia. PORTSMOUTH, on the opposite side of the same river, is noted for its fine harbor.

PETERSBURG, on the Appomattox, is a flourishing town, and exports large quantities of flour and tobacco. ALEXANDRIA, on the right bank of the Potomac, seven miles below Washington, is a place of considerable trade. LYNCHBURG, finely situated on elevated ground, is one of the busiest and wealthiest towns in the state.

WEST VIRGINIA.

Geographical Position.—This state lies between the Alleghany Mountains on the east, and the Big Sandy and the Ohio River on the west.

Physical Features.—The eastern part is mountainous, and the western gradually slopes toward the Ohio and the Big Sandy. Magnificent scenery abounds.

Soil, etc.—The soil in most parts of the state is susceptible of cultivation, and the climate is pleasant and healthful. The leading productions are Indian corn, wheat, and other cereals. Coal, iron, salt, and petroleum, are abundant.

Natural Curiosities.—The Hawk's Nest, on New River, is unsurpassed in grandeur. It is an immense pillar of rock, rising 1,000 feet perpendicularly on all sides but one, where it is connected by a narrow passage with the table-land in the rear.

A number of medicinal springs in the southern part of the state are much frequented; of these, the White Sulphur are the most celebrated.

Inhabitants, etc.—This state, prior to 1862, formed part of the old state of Virginia, and its inhabitants have mainly descended from the English, who were the original settlers. The leading pursuit is agriculture.

Manufactures and Exports.—This state is not, as yet, noted for its manufactures. Its chief exports are coal, iron, and petroleum.

Cities, etc.—WHEELING, the capital, is the most important city on the Ohio between Pittsburgh and Cincinnati.

PARKERSBURG, on the Ohio, and MARTINSBURG, on the line of the Baltimore and Ohio Railroad, are active business centers. CHARLESTON on the Great Kanawha, MORGANTOWN on the West Fork of the Monongahela, and GRAFTON on the East Fork of the same river, are places of considerable trade.

HARPER'S FERRY, at the confluence of the Shenandoah and the Potomac, is noted for its picturesque scenery.

NORTH CAROLINA.

Geographical Position.—This state lies between Virginia on the north and South Carolina and Georgia on the south.

Physical Features.—North Carolina is divided into three sections:—1. The eastern, consisting of a low, sandy plain, abounding in marshes and shallow lakes. 2. The middle section, which is hilly. 3. The western section, which is mountainous. The coast is skirted by low sandy islands, surrounded by shoals, which render navigation exceedingly dangerous.

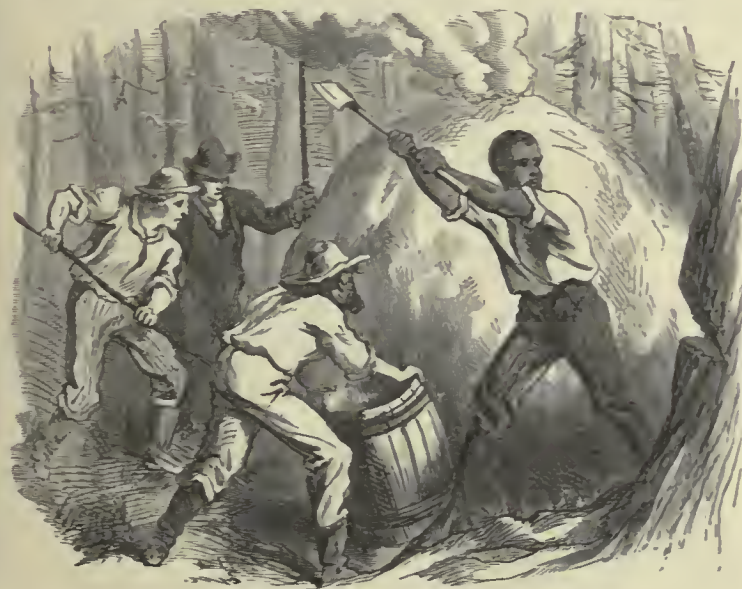
The Great Dismal Swamp, partly in this state and partly in Virginia, has an area of over 100,000 acres, covered mostly with cedar, pine, and cypress trees.

Soil, etc.—Much of the low sandy section, which extends from the coast about 60 miles inland, is covered with vast forests of pitch pine, that furnish, not only lumber, but tar, turpentine, and resin. In the interior, the soil is highly favorable to agricultural pursuits. In the summer, the climate is hot and unhealthy on the coast, but cooler and more salubrious in the elevated districts. Cotton, rice, and indigo, flourish in the eastern lowlands; grain, fruits, etc., in the higher grounds. The staples are Indian corn, tobacco, and sweet potatoes.

This state is rich in minerals, especially gold.

Inhabitants, etc.—The first English settlement in America was made on Roanoke Island, near the entrance to Albemarle Sound, in 1585, under the auspices of Sir Walter Raleigh. Subsequently the colonists became discouraged and returned to England; but in 1650 permanent settlements were made by emigrants from Virginia. The leading pursuit is agriculture; mining and manufactures receive considerable attention.

Manufactures and Exports.—Cotton, iron, and leather, are manufactured. Agricultural products, tar, pitch, and turpentine, are the chief exports.



MAKING TAR IN A NORTH CAROLINA PINE FOREST.

Cities, etc.—RALEIGH, the capital, lies about 6 miles west of the Neuse River, in an elevated and healthy situation. WILMINGTON, on the east bank of the Cape Fear River, is the largest and chief commercial city in the state. FAYETTEVILLE is the center of an extensive trade; it has ample water-power, which is employed in the manufacture of cotton and flour.

NEWBURN, a place of considerable trade, exports lumber, grain, tar, pitch, turpentine, and resin. BEAUFORT has the best harbor in the state. CHARLOTTE, in the west of the state, is rapidly growing, in consequence of its nearness to the gold mines. A mint is established here, for coining the gold. CHAPEL HILL, 28 miles from Raleigh, is the seat of the University of North Carolina.

LESSON LXIV.

THE STATE OF SOUTH CAROLINA.

Geographical Position.—South Carolina lies between North Carolina and Georgia; from the latter it is separated by the Savannah.

Physical Features.—The coast, from 80 to 100 miles inland, is covered with forests of pitch pine, interspersed with numerous swampy tracts. Toward the west, the surface rises, forming a very pleasant country, diversified by hill and dale, forest and stream. The coast is skirted by low islands, on which live oaks, pines, and palmettoes abound, and sea-island cotton and other articles are raised.

Soil, etc.—South Carolina has six distinct varieties of soil:—1. Tide swamp, devoted to the culture of rice. 2. Inland swamp; to rice, cotton, corn, etc. 3. Salt marsh; to long cotton. 4. Oak and pine lands; to long cotton, corn, etc. 5. Oak and hickory lands; to short cotton, corn, indigo, etc. 6. Pine-barrens; to fruits, vegetables, etc. The climate is like that of North Carolina, but warmer. Cotton and rice are the staples. Gold, iron, and lead, are the most important minerals.

Inhabitants, etc.—Among the original settlers, who were mostly English, were some Scotch, Germans, and French Huguenots. The leading objects of pursuit are agriculture and commerce.

Manufactures and Exports.—Manufactures are not extensive. The chief exports are cotton, rice, lumber, and naval stores. More rice is exported from this state than from all the other states in the Union together.

Cities, etc.—COLUMBIA, the capital, is laid out with wide streets, beautifully ornamented with trees. The site of the city is elevated, affording fine views of the surrounding country, which is in the highest state of culture. The South Carolina College is located at this place.

CHARLESTON, the metropolis and principal seaport, is situated on a peninsula between the Ashley and the Cooper River, which unite below the city and form a spacious harbor, about seven miles from the Ocean. Many of the houses are ornamented with verandahs reaching from the ground to the roof, and surrounded by orange-trees, magnolias, palmettoes, etc.

GEORGETOWN, on the west side of Winyaw Bay, is noted for its coasting trade; CAMDEN, on the Wateree, for the battles fought in its vicinity during the Revolution. HAMBURG, a noted cotton mart, on the Savannah, is connected with Augusta, Georgia, by a bridge.

GEORGIA.

Geographical Position.—This state extends from Tennessee and North Carolina on the north, to Florida on the south, and from the Savannah River and the Atlantic on the east, to Alabama on the west.

Physical Features.—Along the coast, the land is low. About 100 miles back from the ocean, it begins to rise, and in the west of the state becomes hilly and mountainous. The coast is lined with low islands, which are covered with rich plantations, and produce sea-island cotton in great quantities.

Soil, etc.—In the north of the state, the valleys are exceedingly rich; in the south, are the tide and swamp lands favorable to the growth of rice, and about 60 miles from the coast pine lands, valuable for their timber. The middle region is well adapted to cotton, tobacco, and grain.

The winters are pleasant, but the summers are very hot. Sickness prevails during August and September. Cotton is the staple. Rice, Indian corn, tobacco, and sweet potatoes, are extensively cultivated. Coffee, sugar, and tropical fruits, are produced in some districts. Gold is found in the north of the state, and iron ore in various sections.

Inhabitants, etc.—Georgia was the last settled of the original thirteen states. The first colony was established by General Oglethorpe, in 1733, on the site of Savannah. The present inhabitants are engaged chiefly in agricultural pursuits.

Manufactures and Exports.—This state has latterly made considerable ad-

vances in the establishment of manufactures. Those of cotton and iron are the most important. The chief exports are cotton, rice, lumber, and naval stores.

Cities.—MILLEDGEVILLE, the capital, on the west bank of the Oconee, is built on elevated ground in the midst of a fertile cotton country, and is the center of a considerable trade. SAVANNAH, the largest and chief commercial city in the state, lies on the Savannah River, 18 miles above its mouth. Its streets are regularly laid out, and its public squares are much admired.

ATLANTA, the terminus of four of the principal railroads in the state, is a great business center, and an important depot for cotton and grain.

AUGUSTA, 231 miles from the mouth of the Savannah, is the depot of a fine tobacco and cotton country. COLUMBUS, on the left bank of the Chattahoochee,



FALLS OF TOCCOA, NEAR CLARKSVILLE, GA.

and MACON, at the head of navigation on the Ocmulgee, are flourishing cities; large quantities of cotton are shipped from these places.

FLORIDA.

Geographical Position, etc.—This state occupies a peninsula south of Alabama and Georgia, between the Atlantic and the Gulf of Mexico. Though the length of sea-coast is over 1,000 miles, there are few good harbors.

Physcal Features.—Florida is generally level, there being no mountains in the state. In the south, dense marshy thickets, called everglades, cover the surface for a distance of 160 miles, with an average breadth of sixty miles.

Soil, etc.—The soil is exceedingly rich on the banks of the rivers; and, for the space of thirty miles from the coast, there is scarcely to be seen a stone weighing more than two or three pounds. As this state approaches within a degree and a half of the torrid zone, its climate is almost tropical. It very rarely freezes. The air is pure and free from fogs.

The chief productions are cotton, Indian corn, sugar-cane, rice, and tobacco. Tropical fruits, such as oranges, lemons, figs, pomegranates, pine-apples, olives, etc., are abundant. The country teems with game, and the surrounding waters yield the finest fish. Alligators and mosquitoes abound on the shores of the inlets and rivers.

Inhabitants, etc.—Florida was originally settled by Spaniards, and did not form part of the Union till 1820, when it was purchased from Spain. St. Augustine was settled in 1564; so that it is by many years the oldest city in the United States. The leading pursuit is agriculture, though but a small part of the state is under cultivation.

Manufactures and Exports.—Florida is not a manufacturing state. The exports consist chiefly of agricultural products.

Cities, etc.—TALLAHASSEE, the capital, is situated on a commanding eminence, about twenty miles north of its port, St. Mark's; it is regularly laid out, and contains several public squares. KEY WEST, on an island of the same name, is the most populous place in the state, being the key to the northern passage to the Gulf of Mexico. About thirty vessels are annually wrecked on this part of the coast; and the sale of what is saved from them constitutes much of the business of Key West. Salt and sponges are exported from the island.

PENSACOLA, on Pensacola Bay, is one of the principal seaports of Florida. Six miles below the city is a U. S. Navy Yard. APPALACHICOLA is noted for the shipment of cotton. ST. AUGUSTINE, on Matanzas Sound, about two miles from the ocean, is distinguished for the mildness and healthiness of the climate, which render it a place of resort for invalids in winter.

LESSON LXV.

THE STATE OF ALABAMA.

Geographical Position, etc.—This state lies between Tennessee on the north, and Florida and the Gulf of Mexico on the south, and extends from Georgia to Mississippi. The length of sea-coast is about sixty miles.

Physcal Features.—The Alleghany Range terminates in the northern part of this state. South of the mountainous district, the surface gradually declines to the Gulf of Mexico; the extreme southern part is a dead level.

Soil, etc.—In the flats between the low mountains in the north, the soil is good. The central part of the state consists chiefly of fertile prairies, and the southern of prairies and pine-barrens, interspersed with alluvial river bottoms of great fertility. The climate is similar to that of Georgia. Running water is rarely frozen.

Cotton is the great staple. In the amount of cotton annually produced, Alabama ranks second in the Union. Indian corn, wheat, oats, rice, live-stock, butter, and sweet potatoes, are produced in large quantities. Sugar-cane grows in the south-western part of the state. Iron, coal, and marble, are the chief minerals.

Inhabitants, etc.—This state was settled by the French. Agriculture is the chief employment of the inhabitants.

Manufactures and Exports.—Cotton manufactures have been introduced with considerable success. The commerce of the state consists chiefly in the exportation of articles of domestic produce.

Cities, etc.—MONTGOMERY, the capital, is situated on a high bluff on the left bank of the Alabama River, and is surrounded by one of the richest of cotton regions. MOBILE is the largest city and chief commercial mart of the state. Steamboats ply between this port and New Orleans, by way of Lakes Borgne and Pontchartrain.

TUSCALOOSA, at the head of steamboat navigation on the Black Warrior, is noted for its active trade and literary institutions. FLORENCE, at the head of steamboat navigation on the Tennessee, is the principal shipping port in the north of the state.

HUNTSVILLE, an important place, situated a few miles north of the Tennessee, is noted for its handsome buildings. WETUMPKA, on the Coosa, and EUFULA, on the Chattahoochee, are largely engaged in the cotton trade.

MISSISSIPPI.

Geographical Position.—Mississippi lies between Tennessee on the north, and the Gulf of Mexico and Louisiana on the south, and extends from the western border of Alabama to the Mississippi.

Physcal Features.—In the north, the land is hilly and broken; in the eastern and central parts, it is a kind of table-land, descending toward the Mississippi. In the south, for about 100 miles from the Gulf of Mexico, it is mostly level, covered with pine forests and cypress swamps.

Soil, etc.—The valleys of the northern and central sections are exceedingly fertile. In the south-east, the soil is mostly sandy, interspersed with a few fertile tracts. The summers are long and hot, but the winters are several degrees colder than in the Atlantic states of the same latitude.

Cotton is the great staple. Indian corn, rice, bananas, sweet potatoes, and a great variety of fruits, together with wool, butter, and live-stock, are among the chief productions.

Inhabitants, etc.—This state was first settled by the French, at Fort Rosalie (now Natchez). Agriculture is the leading pursuit.

Manufactures and Exports.—Mississippi is not a manufacturing state. Its commerce, which is carried on mostly through the port of New Orleans, consists chiefly in the export of cotton and other agricultural products.

Cities, etc.—JACKSON, the capital, is a thriving place, and ships about 30,000 bales of cotton annually. NATCHEZ, the largest and chief commercial city of the state, stands on a bluff 200 feet high, overlooking the Mississippi. It contains many handsome buildings, surrounded by gardens and orange-groves. HOLLY SPRING, in the northern part of the state, is noted for its educational institutions.

VICKSBURG, 400 miles above New Orleans, is an important cotton mart, exporting 100,000 bales annually. COLUMBUS, on the left bank of the Tombigbee, which is here bridged, is the depot of an extensive region.

LOUISIANA.

Geographical Position.—Louisiana extends from Arkansas to the Gulf of Mexico, and from Mississippi to the Sabine River.

Physical Features.—This state has no mountains; nowhere is there an elevation of more than 200 feet. The southern portion of the state, including the great Delta of the Mississippi, is not, for the most part, elevated more than ten feet above the level of the Gulf of Mexico, and is annually inundated by the spring floods.

Soil, etc.—The soil is various; only one-twentieth part of the state is under cultivation. The richest tract is a narrow belt of land, from one to two miles in width, on both sides of the Mississippi, extending from 150 miles above, to about 100 miles below, New Orleans. The climate is like that of Mississippi. Cotton and sugar-cane are the great staples. Nineteenth of the sugar-cane produced in the United States comes from Louisiana. Fruits, such as oranges, figs, peaches, etc., are abundant.

Inhabitants, etc.—This state, first settled by the French, has still a large French population. It was bought from France in 1803 by the United States. Agriculture and commerce form the leading pursuits.

Manufactures and Exports.—This state is largely engaged in the manufacture of sugar and molasses. Its commerce consists in the exportation of sugar, cotton, and other articles of domestic produce.

Cities, etc.—BATON ROUGE, the capital, stands on a bluff thirty feet high, just above a plain occupied by rich sugar-plantations, splendid villas, and groves of tropical fruit-trees. NATCHITOCHES and ALEXANDRIA carry on an active trade.



NEW ORLEANS, LOUISIANA.

NEW ORLEANS, the great commercial emporium of the South-west, is about 100 miles above the mouth of the Mississippi; it is built round a bend in the river, and is hence called "the Crescent City." The Levee, an embankment built to prevent the river from inundating the city at high water, forms a continuous quay, four miles long and one hundred feet wide.

TEXAS.

Geographical Position.—Texas extends from New Mexico and Indian Territory on the north, to the Gulf of Mexico and the Rio Grande.

Physical Features.—The country along the coast, for a distance of about fifty miles toward the interior, is level; then comes a strip 200 miles wide, which is undulating; and this is followed by a mountainous tract in the north and north-west. The coast is lined with low islands.

Soil, etc.—There are few countries of the same extent, that have as little unproductive land as Texas. The climate, free from extremes of heat and cold, is mild and healthy. Snow is seldom seen, except on the mountains. Cotton is the great staple; sugar-cane thrives well in the level country; tobacco and indigo flourish with but little care. Wheat, corn, and rice, are extensively cultivated. Fruits of almost every kind are plentiful. Vast herds of buffaloes and wild horses wander over the prairies. Useful minerals abound.

Inhabitants, etc.—Texas was first settled by the Spanish, in 1692. It was formerly a Mexican province, but achieved its independence in 1836. It remained an independent republic till 1845, when it was admitted as a state into the Union. Agriculture and the rearing of live-stock form the chief pursuits of the inhabitants.

Manufactures and Exports.—Texas has but few manufactures. Cattle and salt are exported to the West Indies. The chief export is cotton.

Cities, etc.—AUSTIN, the capital, is situated on the Colorado, about 200 miles from its mouth. GALVESTON, the most populous and chief commercial city, situated on an island of the same name, at the mouth of Galveston Bay; carries on an extensive coasting trade.

HOUSTON, the second city in the state in commercial importance, lies on Buffalo Bayou (*b'vo*), about 45 miles from its entrance into Galveston Bay. MATAGORDA and BROWNSVILLE are places of considerable trade.

LESSON LXVI.

THE STATE OF MINNESOTA.

Geographical Position.—Minnesota lies west of Wisconsin, and extends from Iowa to British America.

Physical Features.—Though there are no mountains in the state, yet it is the most elevated tract between the Gulf of Mexico and Hudson Bay. The surface is mostly covered with prairies, interspersed with numerous streams and lakes. Parts of the state are densely timbered.

Soil, etc.—The soil in the river valleys is excellent, and the climate, though somewhat severe in winter, is remarkably healthy. The chief productions are corn, wheat, oats, and potatoes. There is but little mineral wealth in the state.

Natural Curiosities.—The Falls of St. Anthony, on the Upper Mississippi, are an object of great interest to travelers. The perpendicular pitch of these falls is seventeen feet; but, including the rapids above and below, the entire descent in a mile is estimated at sixty-five feet. An island, at the brow of the precipice, divides the current into two parts.

Inhabitants, etc.—This state is being rapidly settled by emigrants from the older portions of the Union and various other parts of the world. The leading pursuits are agriculture and lumbering.

Manufactures and Exports.—Manufactures are comparatively limited, but increasing. The exports are confined to agricultural products.

Cities.—ST. PAUL, the capital of the state, an enterprising and busy place, is situated at the head of steamboat navigation on the Mississippi, about 2,000 miles from the Gulf of Mexico, and nine miles by land below the Falls of St. Anthony. ST. ANTHONY and MINNEAPOLIS, located at the falls, are rapidly increasing in wealth and population.

WISCONSIN.

Geographical Position.—Wisconsin lies north of Illinois, between Lake Michigan and the Mississippi River.

Physical Features.—It is mostly level in the southern and central parts, which consist of prairie and timber land. There are no mountains, properly so called; but several ranges of hills diversify the state.

Soil, etc.—The soil of the prairie land is well adapted to agricultural purposes, as also are the “oak openings,” or lands covered with a scattered growth of oak. The pine districts in the north and west are not so rich. The climate, though severe in winter, is equable and healthy. The chief agricultural products are wheat, Indian corn, oats, potatoes, butter, and live-stock. Lead and copper ore abound in the south-western part.



THE UNIVERSITY OF WISCONSIN.

Inhabitants, etc.—This state was first visited and settled by the French. The population, which has grown with wonderful rapidity, consists chiefly of emigrants from the eastern section of the Union, and from various parts of Europe. The leading industrial pursuit is agriculture.

Manufactures and Exports.—Wisconsin is not, as yet, extensively engaged in manufactures. Its commerce consists mainly in the exportation of wheat and other grains, lumber, and lead.

Cities.—MADISON, the capital, is pleasantly located on an isthmus between Lakes Mendota and Monona. It is the seat of the University of Wisconsin. MILWAUKEE, the most populous city of the state, and the chief port on Lake Michigan except Chicago, is the commercial mart of a rich and rapidly improving country.

RACINE, at the mouth of the Root River, has one of the best harbors on Lake Michigan, and ranks second in population and commerce. JANESVILLE and WATERTOWN are finely situated and rapidly growing, having an abundance of water-power from the Rock River.

MICHIGAN.

Geographical Position.—Michigan comprises two large peninsulas; the northern situated between Lakes Superior and Michigan, and the southern between Lakes Michigan and Huron.

Physical Features.—The northern peninsula is much diversified; the southern is generally level or rolling. Michigan has a lake coast more than 1,000 miles in length. It is sometimes called “the Lake State.”

Soil, etc.—The soil of the northern peninsula is rugged and poor, abounding in lofty forests; that of the southern is generally fertile. Though the climate is severe in winter, in summer vegetation comes forward rapidly. The staple products are grain, hay, garden vegetables, wool, butter, cheese, maple sugar, and live-stock. Fish and minerals abound. Valuable salt-

beds are found along the Saginaw Valley, and the copper-mines on the shore of Lake Superior are the richest in the world.

Natural Curiosities.—The shores along Lake Superior are composed of sandstone, which in some places has been worn by the wind and water into fancied resemblances of ruined temples, castles, etc. The most noted specimens of this character are the “Pictured Rocks,” about sixty miles west of the Strait of St. Mary. They extend nearly twelve miles, and rise about 300 feet above the level of the lake.

Inhabitants, etc.—Michigan was first settled by the French, at Detroit, in 1670. The leading industrial pursuit in the southern peninsula is agriculture; in the northern, mining.

Manufactures and Exports.—Michigan is eminently an agricultural state. Its manufactures are as yet limited, but are rapidly increasing. The chief exports are wheat and other grains, live-stock, wool, lumber, and copper.

Cities, etc.—LANSING, the capital, situated on both banks of the Grand River, is the center of an active and increasing trade. DETROIT, the commercial emporium and largest city of the state, is admirably situated for commerce, in which it is extensively engaged. GRAND RAPIDS is the chief depot for the northern country, and has a large inland trade.

MONROE is the principal market for the wheat produced in the vicinity. ADRIAN contains various mills, and is the center of an active trade. KALAMAZOO and ANN ARBOR are flourishing places; the latter is the seat of the State University.

LESSON LXVII.

THE STATE OF OHIO.

Geographical Position.—This state extends from the Ohio River to Michigan and Lake Erie, and from Pennsylvania to Indiana.

Physical Features.—The central part of the state is a high table-land, about 1,000 feet above the level of the sea. The surface in general is undulating and agreeably diversified. There are no mountains.

Soil, etc.—Nine-tenths of this state is susceptible of cultivation, and nearly three-fourths exceedingly productive. The climate is pleasant and healthy. The staple products are grain, butter, cheese, wool, orchard products, maple sugar, tobacco, and live-stock. Ohio ranks first in the Union in the amount of wool annually produced. Iron, coal, and petroleum, are abundant in the south-eastern part.

Inhabitants, etc.—This region remained in possession of the Indians till five years after the Revolution, when General Putnam, with a company of New Englanders, made the first white settlement at Marietta. It is now the third state in the Union in wealth and population. Agriculture is the leading pursuit. Manufactures and commerce also receive attention.

Manufactures and Exports.—The chief manufactures are those of woollen goods, iron, and leather. Among the exports, which are sent mostly to New Orleans or the Atlantic seaboard, we may mention flour, grain, live-stock, wool, cheese, butter, pork, and lard.

Cities.—COLUMBUS, the capital, on the Scioto River, is an active business center, being surrounded by a rich and populous country. CINCINNATI, the largest city of the Western States, and hence called “the Queen of the West,” is located in a beautiful valley on the Ohio, and is distinguished for the extent of its commerce, the variety of its manufactures, and its literary and benevolent institutions. There are many large vineyards near the city, which produce wine equal to that of France.

CLEVELAND, distant about 200 miles, by water, from Buffalo, is the great commercial emporium in the north of the state. TOLEDO is noted for its fine harbor and the extent of its commerce. SANDUSKY, on Sandusky Bay, three miles from Lake Erie, is an important commercial city, and is extensively engaged in the plaster and lime trade. DAYTON and ZANESVILLE are flourishing places, distinguished for the extent and variety of their manufactures. CHILLICOTHE, noted for its beautiful situation, is the center of trade for the fertile valley of the Scioto.

KENTUCKY.

Geographical Position.—Kentucky lies north of Tennessee, and south of the Ohio River, which separates it from Illinois, Indiana, and Ohio.

Physical Features.—The surface in the eastern section is hilly and mountainous; in the west, it is generally level.

Soil, etc.—The soil of the greater part of the state is celebrated for its fertility, and the climate is mild and salubrious. The staple products are Indian corn, flax, hemp, and tobacco. The other noted productions are wheat, rye, oats, wool, butter, bees'-wax, and honey. In the amount of tobacco annually produced, this state ranks second only to Virginia. Coal and iron are abundant, and salt and mineral springs are numerous.

Natural Curiosities.—Among the natural curiosities the most noted is the Mammoth Cave, situated about 130 miles south-west of Lexington. This remarkable cave has been explored for a distance of ten miles.

Inhabitants, etc.—Kentucky originally formed part of Virginia; it was first explored by Colonel Boone and his companions, in 1769. The chief industrial pursuit is agriculture.

Manufactures and Exports.—Kentucky is not extensively engaged in manufactures; agriculture is the leading pursuit. Cattle, horses, mules, and swine, are raised in great numbers, and sent to the Atlantic and Gulf States; these, with corn, tobacco, cotton bagging, and hemp cordage, form the chief exports.

Cities.—FRANKFORT, the capital, is the center of an active trade. LOUISVILLE, on the rapids of the Ohio, is the metropolis. To enable boats to pass around the rapids, a canal, $2\frac{1}{2}$ miles long, has been constructed.

LEXINGTON, the oldest city in the state, is distinguished for its literary and scientific institutions. COVINGTON, a flourishing city, stands directly opposite to Cincinnati. NEWPORT is an important and growing place.



A SCENE ON THE KENTUCKY RIVER.

TENNESSEE.

Geographical Position.—Tennessee lies south of Kentucky, and north of Georgia, Alabama, and Mississippi.

Physical Features.—This state is divided into East Tennessee, which is mountainous,—Middle Tennessee, which is hilly,—and West Tennessee, which is generally level.

Soil, etc.—The soil is generally fertile, particularly in the middle and western sections, and the climate is mild and genial. The staple products are Indian corn, tobacco, and cotton. Grain, grass, and fruit, are abundant. Immense numbers of swine and mules are raised. The chief mineral resources are iron, copper, and coal.

Inhabitants, etc.—Tennessee was first settled by hardy pioneers, of English descent, from North Carolina, of which colony it originally formed a part. Agriculture is the leading pursuit.

Manufactures and Exports.—Tennessee is not noted as a manufacturing state. The exports are live-stock, fruits, and the staple products.

Cities, etc.—NASHVILLE, the capital, is a handsome city, and the seat of an active trade; the Cumberland is here crossed by a magnificent suspension bridge. MEMPHIS, built on a high bluff, is the most important city on the Mississippi, between St. Louis and New Orleans, and ships large quantities of cotton. KNOXVILLE, at the head of steamboat navigation on the Holston, and MURFREESBORO, in a fertile plain 80 miles from Nashville, are important and flourishing places.

LESSON LXVIII.

THE STATE OF ARKANSAS.

Geographical Position.—This state lies west of the Mississippi River, and extends from Missouri on the north to Louisiana on the south.

Physical Features.—The surface is low and marshy in the east, for a distance of 100 miles, undulating in the interior, and mountainous in the west.

Soil, etc.—Along the rivers, the soil is very fertile; in other parts, sterile. The climate is healthy and temperate in the west; in the east and south, it is moist and unhealthy. The staple productions are cotton, Indian corn, and live-stock. The chief mineral resources are coal, iron, copper, lead, zinc, gypsum, manganese, and salt. Hot springs are numerous along the Washita River. Arkansas is still the abode of numerous wild animals, such as deer, elks, bears, and wolves.

Natural Curiosities.—Sixty miles from Little Rock are the celebrated Hot Springs, about 100 in number; they are much resorted to by invalids.

Inhabitants, etc.—Arkansas was originally settled by the French. The present inhabitants are engaged chiefly in agricultural pursuits.

Manufactures and Exports.—This state is not extensively engaged in manufactures. The staple products form the chief articles of export.

Cities, etc.—LITTLE ROCK, the capital and largest town, is the business depot of a wide extent of country. CAMDEN, a flourishing place on the Washita River, ranks next to the capital in population. VAN BUREN is the chief commercial emporium. HELENA and BATESVILLE carry on a flourishing inland trade.

MISSOURI.

Geographical Position.—This state borders on the west side of the Mississippi River, between Iowa and Arkansas.

Physical Features.—North of the Missouri are picturesque hills, interspersed with extensive prairies and shady groves; south of the river, the surface is hilly and mountainous, except in the south-east, where it is low and marshy.

Soil, etc.—The soil is generally fertile, particularly along the margin of the rivers. The climate, though variable, is healthy. The staple productions are Indian corn, wheat, hemp, and tobacco. Fruits grow in great profusion. The prairies supply excellent pasturage for immense numbers of cattle. Missouri is rich in lead, iron, coal, and copper.

Inhabitants, etc.—Missouri was originally settled by the French, but the present inhabitants consist chiefly of emigrants from the other states in the Union, and their descendants. The leading industrial pursuit is agriculture. Mining is carried on to some extent.

Manufactures and Exports.—Manufactures are increasing. Among the chief exports are live-stock, pork, flour, lead, and tobacco.

Cities, etc.—JEFFERSON CITY, the capital, has a highly picturesque situation on the right bank of the Missouri. ST. LOUIS, on the west bank of the Mississippi, about 20 miles below the mouth of the Missouri, and 1,200 miles from New Orleans, is the largest place in the state, and one of the most important commercial cities in the Mississippi valley. It contains numerous costly public edifices, and extends along the river for about seven miles, presenting an imposing appearance.

ST. CHARLES is finely situated on the left bank of the Missouri. ST. GENEVIEVE, on the Mississippi, about 60 miles below St. Louis, is the shipping port for the products of the iron works at Iron Mountain. Large quantities of copper, lead, and white sand, are exported from this place.

HANNIBAL is rapidly increasing in commercial importance. INDEPENDENCE, located about five miles south of the Missouri, carries on considerable trade, being the place where many of the emigrants, on their way to Oregon and California, procure their outfit.



HALT OF AN EMIGRANT PARTY.

KANSAS.

Geographical Position.—This state lies between parallels 37° and 40° N. lat., and extends from Missouri to Colorado.

Physical Features.—Kansas, for the most part, consists of rolling prairie; there are no mountains in the state.

Soil, etc.—Kansas is one of the finest grazing states in the West. There are some sandy plains, but most of the state is unsurpassed in fertility, particularly the valleys of the Missouri and the Kansas. The climate is mild; the winters are short, and but little snow falls. The great staple is Indian corn. Gypsum and coal are abundant.

Inhabitants.—The eastern part has been rapidly settled by emigrants from the older states, and the population is still increasing very fast. In the western part of the state there are several Indian tribes. Agriculture is the chief pursuit.

Manufactures and Exports.—Manufactures are as yet limited. The principal exports are agricultural products.

Cities.—TOPEKA, the capital, is on the right bank of the Kansas River. LEAVENWORTH and ATCHISON, on the Missouri, and LAWRENCE, on the Kansas, are important business centers. Leavenworth is the metropolis of the state.

NEBRASKA.

Geographical Position.—This state lies between the 40th and the 43d parallel of north latitude, and extends from the Missouri River westward to Colorado and Wyoming.

Physical Features.—There are no mountains in Nebraska. The surface is little else than one vast rolling prairie, here and there diversified by a picturesque stream, and affording an inexhaustible supply of pasturage.

Soil, etc.—The soil in the eastern part of the state is deep and very fertile; the western section is, for the most part, unproductive. The climate is

milder than that of the Eastern States situated in the same latitude. The leading productions are Indian corn, wheat, and other cereals. Coal, iron, and limestone, are abundant. Salt-springs are numerous in the south-eastern part.

Inhabitants.—The population is rapidly increasing by immigration. The chief industrial pursuit is agriculture. Hunting and trapping furnish employment to many.

Manufactures, etc.—Manufactures have not, as yet, received much attention. This state, like Kansas, holds an important position as the thoroughfare of a large western emigration. Railroads are in course of construction, which will greatly extend its commercial facilities.

Cities, etc.—LINCOLN, a place recently laid out in the south-eastern part of the state, is the capital. OMAHA, the metropolis of the state, and the eastern terminus of the great Union Pacific Railroad, is pleasantly situated on the Missouri River. NEBRASKA CITY, on the same river, is largely engaged in transporting freight to the territories.

LESSON LXIX.

THE STATE OF IOWA.

Geographical Position.—Iowa lies north of Missouri, between the Mississippi and the Missouri River.

Physical Features.—The general surface is that of a high, rolling prairie, there being no mountains in the state. A tract of table-land divides the waters which flow into the Mississippi from those that empty into the Missouri. The banks of the streams are generally skirted with wood.

Soil, etc.—The soil is exceedingly fertile and easily cultivated, except in the north-east, where it is rugged and rocky. The climate is temperate and healthful. The staple products are Indian corn, wheat, and live-stock. The lead-mines in the vicinity of Dubuque are among the richest in the United States. Coal is abundant; iron ore and copper have been found in considerable quantities.

Inhabitants, etc.—Iowa was settled by the French, and formed part of the Louisiana purchase. The present inhabitants consist mainly of emigrants from the other states in the Union, and from Europe. Agriculture is the leading pursuit. Much attention is paid to the production of wool, and the raising of swine for market.

Manufactures and Exports.—Iowa is not yet extensively engaged in manufactures, though it possesses plenty of coal and an abundance of water-power. The chief exports are grain, flour, lead, and pork.



THE ROCKY TOWERS, NEAR DUBUQUE, UPPER MISSISSIPPI.

Cities, etc.—DES MOINES, pleasantly situated on a river of the same name, is the capital. DUBUQUE, on the right bank of the Mississippi, the earliest

settlement, and now the metropolis of the state, is the great depot of the mineral region.

DAVENPORT, on the Mississippi, in the neighborhood of some of its finest scenery, is an important and growing city. **KEOKUK**, a flourishing town, lies at the foot of what are called the lower rapids of the Mississippi, immediately above the mouth of the Des Moines. **BURLINGTON**, situated on the Mississippi, and connected with the Illinois shore by a steam ferry, is a place of considerable trade. **IOWA CITY**, formerly the capital of the state, stands at the head of steamboat navigation on the Iowa River, 80 miles above its mouth.

ILLINOIS.

Geographical Position.—This state lies south of Wisconsin, and east of the Mississippi River, which separates it from Iowa and Missouri.

Physical Features.—By far the greater part of the state is a table-land, from 300 to 800 feet above the level of the Gulf of Mexico, sloping toward the south, as the course of the rivers indicates. There are no mountains, but vast undulating prairies meet the eye, decked with beautiful wild flowers of almost every hue.

Soil, etc.—The soil is, for the most part, very fertile; the climate is healthy, and milder than that of the Atlantic States lying in the same latitude. The staple products are Indian corn, wheat, oats, hay, butter, cheese, and potatoes. Illinois ranks first in the Union, in the production of corn and wheat.

Lead and coal are the chief minerals, and iron ore is found in many localities. Salt-springs, from which large quantities of salt are manufactured, are found in the southern part of the state.

Inhabitants, etc.—This state was settled by the French. Agriculture forms the chief employment of the present population.

Manufactures and Exports.—Illinois is not distinguished as a manufacturing state. Agriculture is the leading pursuit, and the advantages of the state in this respect are unsurpassed by those of any other in the Union. Lead, grain, potatoes, and wool, form important articles of export.

Cities.—**SPRINGFIELD**, the capital, stands near the center of the state, on the border of a large and beautiful prairie. **CHICAGO**, the most populous and chief commercial city, lies on the south-west shore of Lake Michigan, on both sides of the Chicago River, with an elevation of only about five feet above the surface of the lake. Chicago has grown with almost incredible rapidity, and is the great shipping depot of an immense region.

PEORIA, at the outlet of Peoria Lake, is an important commercial city. **QUINCY**, in the vicinity of a rich prairie, is actively engaged in trade. **GALENA**, on the Fevre River, six miles above its entrance into the Mississippi, is the metropolis of the lead region of northern Illinois.

INDIANA.

Geographical Position.—This state lies between Ohio and Illinois, and extends from Lake Michigan and Michigan on the north, to the Ohio River.

Physical Features.—There are no mountains in the state. The southern part, near the Ohio, is hilly; and the south-western section is somewhat rocky and broken. The remainder of the state is generally level, and is interspersed with extensive prairies and rich bottom-lands, thickly studded with forests. The general inclination of the surface is toward the Ohio.

Soil, etc.—The soil, for the most part, is fertile, and the climate is healthy and mild for the latitude. Indian corn is the staple; in the amount of wheat produced, Indiana ranks second in the Union. The other leading products are oats, potatoes, fruits, butter, live-stock, wool, and maple sugar. Of minerals, coal and iron ore are the most important.

Inhabitants, etc.—This state was settled by the French. In 1800, in connection with the present state of Illinois, it was erected into the territory

of Indiana, and, sixteen years after, was admitted into the Union as an independent state. Agriculture forms the chief employment.

Manufactures and Exports.—Though this state possesses ample water-power, it is not as yet engaged in manufactures to any great extent. An active lake and river trade is carried on. The leading exports are live-stock, pork, beef, lard, Indian corn, wheat, and wool.

Cities, etc.—**INDIANAPOLIS**, the capital and largest city, situated in the central part of the state, is the terminus of several railroads, and is destined to become a very important city. **NEW ALBANY**, two miles below the Falls of the Ohio, is more extensively engaged in steamboat-building than any other port on the river.

EVANSVILLE, on the Ohio, the southern terminus of the longest canal in the United States, is the principal shipping point for the grain and pork of south-western Indiana. **FORT WAYNE** is the business depot of a highly fertile district. **LA FAYETTE**, at the head of steamboat navigation on the Wabash, is the chief grain market in the state. **TERRE HAUTE** is a busy railroad center, and **MADISON** is noted for its extensive pork-packing establishments.

LESSON LXX.

THE STATE OF CALIFORNIA.

Geographical Position.—This state lies south of Oregon, and extends westward from Nevada and Arizona to the Pacific Ocean.

Physical Features.—A large portion of the state is traversed by mountain ranges. The great valley of the Sacramento and San Joaquin extends from north to south about 500 miles; it is bounded on the east by the Sierra Nevada, and on the west by the Coast Range. On the western slope of the former are the principal gold mines.

Soil, etc.—The soil in the valleys is exceedingly fertile. The year is divided about equally into two seasons—the wet and the dry, the former lasting from the middle of November to the middle of May. Among the chief agricultural products are barley, wheat, potatoes, and fruits. The fruits and garden vegetables grow to a remarkable size. Grapes are largely cultivated, and excellent wine is made. Fish are fine and plentiful.

In the abundance of its minerals, particularly gold, California takes the lead of the other states. The quicksilver mine of New Almaden, about 13 miles south of San José, is probably the richest in the world.

Natural Curiosities.—Among the most remarkable curiosities are the hot sulphur springs, about 90 miles north of Benicia, which eject boiling water to a height of from 10 to 15 feet.—The Falls of the Yosemite are, as far as height is concerned, the greatest cataract in the world.

Inhabitants, etc.—California was first colonized by the Spanish. In 1822 it became a province of Mexico, and in 1848 Mexico ceded it to the United States. The present inhabitants consist chiefly of emigrants from other parts of the Union, and from the Old World, including 30,000 Chinese. Mining is the leading pursuit.

Of late years this state has made rapid progress in commerce, and it now carries on an extensive trade, not only with the Atlantic States by way of Panama, but also with the Old World, by means of steamers that ply between San Francisco and ports on the opposite side of the Pacific.

Manufactures and Exports.—Manufactures are rapidly multiplying. Among the leading exports are gold, silver, and wine.

Cities, etc.—**SACRAMENTO CITY**, the capital, on the left bank of the Sacramento River, is a noted commercial port, being accessible to large-sized vessels. **SAN FRANCISCO**, the great commercial metropolis of the Pacific coast, lies on the west side of San Francisco Bay. The entrance to this city from the ocean is through a strait four miles long, called the "Golden Gate."

MARYSVILLE, the third town of the state in population, and STOCKTON, the fourth, are respectively the centers of trade for the northern and the southern mining districts. BENICIA, situated on Karquenias (*kar-ke'nās*) Strait, contains an arsenal, a navy-yard, and large docks for the repairing of steamers.

OREGON.

Geographical Position.—Oregon lies north of California and Nevada, and extends westward from Idaho to the Pacific Ocean.

Physical Features.—Much of the state is mountainous, but fertile valleys abound. Three mountain ranges diversify the surface.

Soil, etc.—The soil, except in the eastern portions, is fertile. The climate is mild for the latitude. Wheat, orchard-fruits, hay, and potatoes, are the staples. Oregon is noted for forests of gigantic pine and fir trees. Its mineral resources have not yet been developed, but gold and coal have been found in various localities. Salmon abound in the Columbia River.

Inhabitants, etc.—The inhabitants consist chiefly of emigrants from the different states in the Union, engaged mainly in agriculture and lumbering.

Manufactures and Exports.—Manufactures are limited. The leading exports are lumber, orchard-fruits, live-stock, and flour.

Important Places.—SALEM, the capital, —PORTLAND, the metropolis and chief commercial town, —and OREGON CITY, a flourishing place possessing excellent manufacturing facilities, —are all situated on the Willamette River.

NEVADA.

Geographical Position.—This state is situated south of Oregon and Idaho, between Utah on the east and California on the west.

Physical Features.—The surface is chiefly an elevated table-land; its valleys are from four to five thousand feet above the level of the sea.

Soil, etc.—The soil is fertile only in the valleys. Timber is scarce, and there are no large rivers. The climate is pleasant; the atmosphere is pure, dry, and healthy. Nevada is noted for its rich silver-mines, which form the chief source of wealth. Gold, coal, iron, and salt, also abound.

Inhabitants, etc.—The inhabitants are chiefly emigrants from the older states. Mining forms the leading pursuit; agriculture and stock-raising also receive attention. There are few manufactures; the leading export is silver.

Important Places.—CARSON CITY, near Carson River, is the capital. VIRGINIA, the commercial metropolis, is an important depot of supplies for the mining regions.

LESSON LXXI.

WASHINGTON TERRITORY.

Geographical Position.—Washington lies between British America and Oregon, and extends from Idaho to the Pacific Ocean.

Physical Features.—Much of the surface is mountainous. The territory is crossed by the Coast and the Cascade Range; several peaks of the latter are covered with perpetual snow.

Soil, etc.—Most of the region east of the Cascade Mountains is sterile and nearly destitute of wood; but west of this range the soil is fertile, and forests of gigantic firs, spruces, and cedars, abound. The climate is remarkably mild for so high a latitude. Nowhere are fish more plentiful. Gold and coal have been found in some localities.

Inhabitants, etc.—The population of Washington and the other territories consists mainly of emigrants from the states, who are rapidly increasing in number, and native Indians, who are fast diminishing. Manufactures, as in all newly-settled regions, are limited. Lumber is the leading article of export from Washington.

Important Places.—OLYMPIA, the capital, stands at the head of Puget Sound. STEILACOOM, WALLA WALLA, and VANCOUVER, are important places.

IDAHO TERRITORY.

Geographical Position.—Idaho lies east of Washington Territory and Oregon, and west of Montana and Wyoming.

Physical Features, etc.—The surface is mountainous. The Bitter Root and Rocky Mountains form the eastern boundary. The valleys are fertile and well watered. Many thousands of acres are covered with "bunch-grass," affording excellent pasturage. Gold and silver are found in abundance, and mining operations are carried on in various parts.



MINERS AT WORK.

Important Places.—BOISE CITY, on a river of the same name, is the capital. Among the principal places are IDAHO CITY, LEWISTON, and FLORENCE.

MONTANA TERRITORY.

Geographical Position.—Montana lies between Dakota on the east and Idaho on the west, and extends from British America to Wyoming.

Physical Features, etc.—The surface is generally mountainous. Along the streams that form the Missouri, the country is an undulating prairie. The climate is mild for the latitude. The soil in the south, along the river-valleys, is productive. The streams are fringed with forests of fir, pine, and cedar. The chief minerals thus far discovered are gold and silver. The Great Falls of the Missouri, which belong to this territory, are the grandest in N. America, except the Falls of Niagara.

Important Places.—VIRGINIA CITY, an important mining town, is the capital of Montana. BANNOCK CITY, noted for its rich silver-mines, is situated on the Jefferson River, not far from its source in the Rocky Mountains.

DAKOTA TERRITORY.

Geographical Position.—Dakota Territory lies east of Montana and Wyoming, and west of Minnesota and Iowa.

Physical Features, etc.—The Black Hills extend into the south-western part; the rest of the territory is mostly level, and well supplied with lakes and ponds. The climate is healthy, and the soil is well adapted to agriculture and pasturage. The valleys of the Missouri and the Red River of the North are highly productive. Furs are obtained in large quantities.

Dakota is as yet very sparsely settled; about one-fourth of the inhabitants are Indians, many of whom are engaged in farming and stock-raising.

Important Places.—YANKTON, on the left bank of the Missouri River, about 65 miles west of the Iowa line, is the capital. Most of the settlements are in the south-eastern part of the territory.

INDIAN TERRITORY.

Geographical Position, etc.—Indian Territory lies south of Kansas and north of Texas. This tract has been set apart by the government for the permanent residence of those Indian tribes that formerly occupied some of the south-western states. The United States have several military posts in the territory, but exercise no control over it, except when it may be necessary to preserve peace on the frontier.

Some of the removed tribes have made considerable advances in agriculture, and have established schools and churches; while others have become indolent and intemperate, and are fast diminishing in numbers.

TAN-LE-QUAN, the capital of the Cherokee nation, is the principal place.

LESSON LXXII.

TERRITORY OF NEW MEXICO.

Geographical Position.—New Mexico lies between Texas and Arizona, and extends from Colorado on the north to Mexico and Texas on the south.

Physical Features.—The surface is a high table-land, traversed by stupendous mountain-ranges and broken ridges. The great valley of the Rio Grande, about 20 miles in width, crosses the territory from north to south. Owing to the elevation of the surface, the climate is temperate for the latitude.

The soil is mostly barren. In the river-valleys, agriculture is pursued to some extent. The vine thrives in the southern part. Gold, silver, copper, and other minerals, are abundant.

Inhabitants, etc.—The population consists chiefly of wandering Indian tribes, Mexicans, and emigrants from different parts of the Union.

SANTA FÉ, the capital, is on the great western overland route from St. Louis, from which it is about 1,000 miles distant.

ARIZONA TERRITORY.

Geographical Position.—Arizona lies east of California and west of New Mexico, and extends from Mexico to Utah.

Physical Features.—The territory is crossed by several minor mountain-ranges. Much of the soil is sterile, but the climate is, in most parts, delightful. Arizona is rich in minerals, particularly silver. Mining is the chief pursuit of the white inhabitants, among whom are a number of Mexicans. Some of the Indian tribes reside in villages, and are engaged in agriculture.

Important Places.—PRESCOTT, the capital, is situated in the neighborhood of a rich mining district, near the center of the territory. LA PAZ, on the Colorado River, and TUCSON, on the Santa Cruz, are among the chief towns.

UTAH TERRITORY.

Geographical Position.—Utah extends westward from Colorado to Nevada, and southward from Idaho to Arizona.

Physical Features.—The greater part of Utah is mountainous and barren, but peculiarly adapted to the raising of stock. The section lying west of the Colorado valley is called the Great Basin; all the rivers of this region terminate within its limits, in lakes that have no visible outlets.

In fertile spots that are capable of being watered, grain and garden vegetables are cultivated with success. The inhabitants are mostly Mormons. Agriculture is the chief pursuit; manufactures receive some attention. Commerce is confined chiefly to traffic with overland emigrants, and with the miners of Idaho, Nevada, and Colorado, who here obtain supplies of provisions and live-stock.

Important Places.—SALT LAKE CITY, on the Jordan River, not far from Great Salt Lake, is the capital of the territory. PROVO CITY, on the east shore of Utah Lake, is an important and growing place.

WYOMING TERRITORY.

Geographical Position, etc.—Wyoming, formerly part of Dakota Territory, and still attached to it for the purposes of government, lies between Montana on the north and Colorado on the south.



HUNTING THE BUFFALO.

The surface is mountainous. The south-western part of the territory is traversed by the Rocky Mountains, the north-eastern part by the Black Hills. Fremont's Peak is on the boundary between Wyoming and Idaho.

But little is known about the soil or resources of this territory. Few settlers have as yet found their way to it. FORT LARAMIE, on the north fork of the Platte or Nebraska River, is the principal place.

COLORADO TERRITORY

Geographical Position.—Colorado lies between Kansas on the east and Utah on the west, and extends from Wyoming to New Mexico.

Physical Features, etc.—The Rocky Mountains traverse Colorado from north to south. Near the center of the territory is Pike's Peak, one of the loftiest summits in the United States. The cultivation of the soil is confined chiefly to tracts near streams, which can be watered. The mountain regions are densely wooded, but on each side of them are vast plains almost treeless. Colorado is particularly noted for its rich gold-mines, which lie in the central parts of the territory, among the mountains. Valuable mines of silver have also been discovered.

Some manufacturing is done at mills, breweries, and tanneries; but mining is the chief pursuit, and gold is the principal article exported.

Important Places.—GOLDEN CITY, situated near the eastern base of the Rocky Mountains, is the capital. DENVER, on the right bank of the South Platte, is the largest place and the commercial emporium. COLORADO CITY, on an affluent of the Arkansas, is a depot for the neighboring mines.

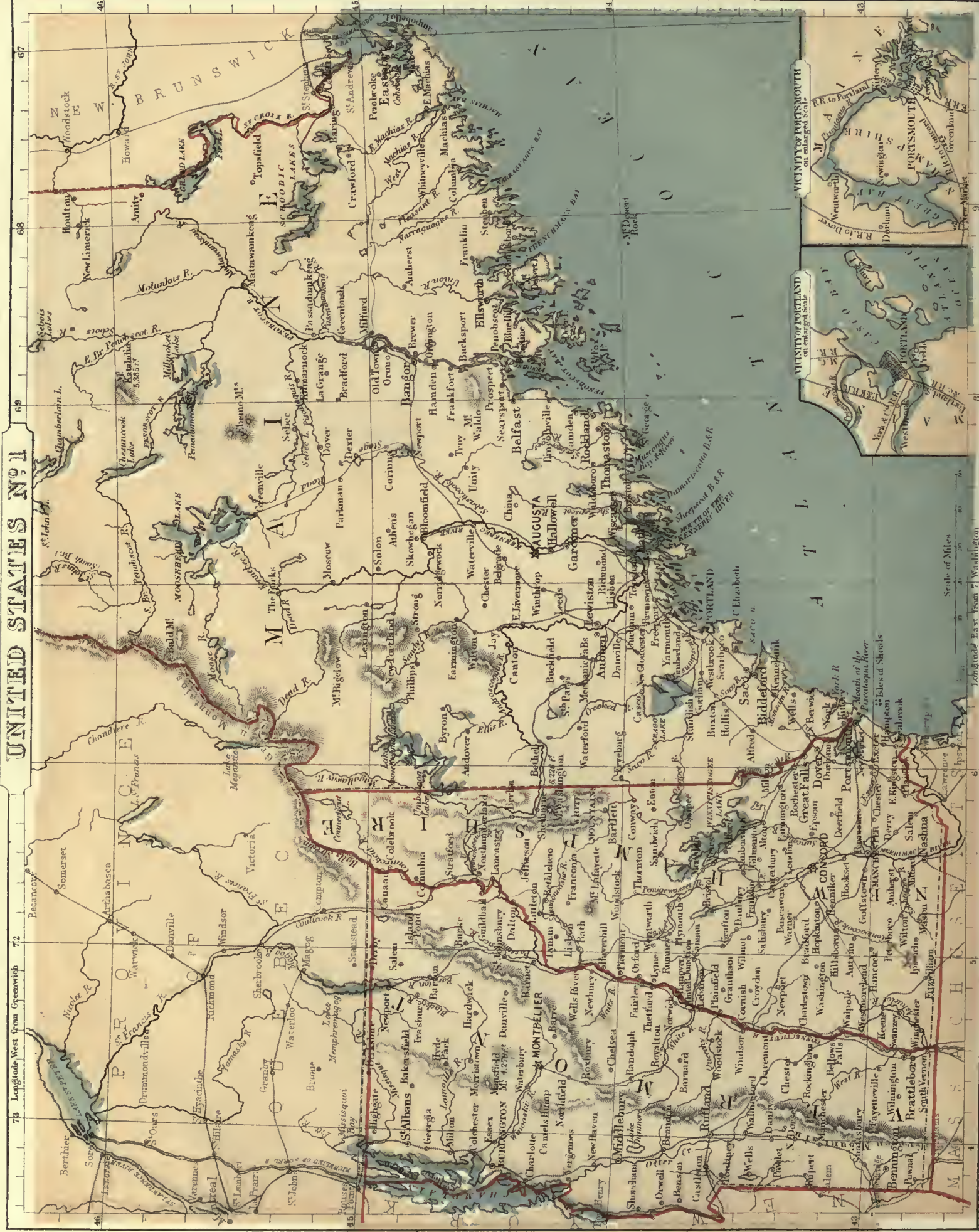
THE DISTRICT OF COLUMBIA.

This district, situated on the north-east side of the Potomac River, has an area of 60 square miles. It was ceded by Maryland to the Federal Government, and is set apart as the site of the Capital of the United States. It contains Washington, the capital in question, and the city of Georgetown.

WASHINGTON is finely located between the Potomac River and its eastern branch. Among the many public buildings may be mentioned the Capitol (a superb edifice, in which Congress meets), the President's House, the Smithsonian Institute, the Treasury Buildings, and the Patent-Office.

GEORGETOWN, separated from Washington by a small creek, is one of the greatest shad and herring markets in the United States.

UNITED STATES NO. 1



[The next eleven pages of matter, opposite the Sectional Reference Maps of the U. S., may be omitted, if the teacher so desires, in first passing through the volume, and taken up as a second course, or when the book is reviewed. They present the Physical Geography of the states in sections, give some idea of the immense network of railroads spread over our country, and furnish some general questions different from those given under the former maps.]

VERMONT, NEW HAMPSHIRE, MAINE.

LESSON LXXIII.

PHYSICAL GEOGRAPHY.

Latitude and Climate, considered relatively.—The three states represented in Sectional Map No. 1 form the north-eastern extremity of the United States. Yet they lie farther south than the greater part of Europe, being in the latitude of southern France and northern Italy.

Exposed to damp and chilly east winds from the Atlantic, they are considerably colder than the countries in the same latitude on the Pacific coast or in the Old World. Eastport has an average temperature 9 degrees colder than that of Astoria in Oregon, though farther south than the latter, and with its severe winter and deep snows lies in the same latitude as Bordeaux (*bor-do'*) in France, where snow is rare and fire is but little needed.

Mountain Chains.—The whole system of mountains running near and parallel to the Atlantic coast is called the Alleghany or Appalachian Chain.

We have, in these states, its north-eastern section, consisting of the Green and the White Mountains. The former traverse Vermont, and continuing in a north-easterly direction form the boundary between Maine and Canada. The White Mountains proper lie in northern New Hampshire; but a series of detached elevations running southward into Massachusetts and north-easterly into Maine, may be regarded as continuations of the range.

Surface.—East of the Green Mountains and parallel to them stretches the long and narrow valley of the Connecticut, intersected by numerous short tributaries of that stream, descending from the higher grounds on either side. The Green Mountains form the watershed between the rivers of the St. Lawrence system and those of the Atlantic. The western part of Vermont, therefore, belongs to the basin of the St. Lawrence, while the eastern section, with New Hampshire and Maine, is embraced in the Atlantic basin.

The Coast.—This part of the Atlantic coast is high and rocky, and is skirted with islands of a like character. It is indented with numerous bays, and contains many fine

harbors. These afford excellent facilities for commerce and ship-building, and account for the fact that all the large cities and towns of Maine are situated in the southern part of the state.

The Atlantic Plain.—The region between the ocean and the nearest highlands is called the Atlantic Plain. It is here from 50 to 100 miles wide, and is traversed by a great number of rivers; which, having a rapid descent, are for the most part not navigable to any great distance. They are invaluable, however, for the excellent water-power which they furnish, and their banks have become the sites of busy manufacturing villages, towns, and cities.

Lumbering in Maine.—A great part of Maine is still covered with forests of pines, spruces, hemlocks, and other trees, which yield immense quantities of valuable timber. The hardy wood-cutters take advantage of the snow in winter to drag the logs which they have prepared over its frozen surface to the nearest streams, and float them down during the spring and summer to saw-mills, where they are manufactured into different kinds of lumber.

LESSON LXXIV.

Questions on Map of U. S. No. 1.

Latitude.—Between what degrees of latitude is Maine situated? *Between about 43° and 47½° N. lat.* What other state in the Union extends as far north? *Michigan.* What state extends still farther north? *Minnesota.* What country on the coast of Europe is in the same latitude as Maine? What country on the coast of Asia is in the northern part of the Chinese Empire. What city in Europe is in about the same latitude as Portland? *Florence, in Italy.*

Longitude.—Between what degrees of longitude is Maine? *Between 68½° and 71° W. lon.* Does any other state extend as far east? What countries on the coast of South America are in the same longitude as Maine? *A part of Venezuela and U. S. of Colombia.* What island of the West Indies? *The eastern part of H.*

Exercise with Scale of Miles.—What is the length of Vermont? How far, in a direct line, is the capital from Burlington? What is the length of New Hampshire? What is the length of Maine from north to south? *250 miles.* What is the extent of coast in a direct line? What, including all the indentations? *About 1,000 miles.*

Towns, Islands.—What four important railroad stations are situated on the Connecticut? *W. R., White R. J., H., and B. F.* In what state are they? For what are the towns on Penobscot Bay noted? *For ship-building.* What islands are in Lake Champlain? To what state do they belong? *V.* What islands are off the coast of Maine? Off the coast of New Hampshire?

Mountains, Lakes.—Where is Mount Mansfield? *Mt. Lafayette?* Bald Mountain? What mountain in Maine is in lat. 46°? What

other mountains in Maine? To what system do all these mountains belong? *The Appalachian.* Of what lake is the Presumpscot River the outlet? Of what, the Androscoggin? The Kennebec? The Penobscot? The St. Croix?

Small Maps.—What fort defends Portland? Mention the largest of the islands near Portland. What places are in the vicinity of Portsmouth, N. H.? Which of these stands opposite Portsmouth, on the Piscataqua? How is the Navy Yard situated?

REFERENCE TABLE OF PRINCIPAL RAILROADS.

[The following Tables are not to be learned, but are presented for purpose of reference, and to show the great commercial facilities of our country. Questions are subjoined, which direct the pupil's attention to their most important points. They will serve as models to the teacher for forming questions of his own, if he desires to pursue the subject further.]

Name.	Where from.	Where to.	Miles.
Montreal & Champlain.....	Montreal.....	Rouse's Point.....	49
Grand Trunk.....	".....	Quebec, via Richmond.....	172
Vermont Central & Canada.....	Rouse's Point.....	Portland.....	297
Rutland & Burlington.....	Burlington.....	Windsor, via Montpelier.....	158
Rutland & Washington.....	".....	Bellevue Falls, via Rutland.....	130
Bennington & Rutland.....	Rutland.....	Troy, via Poultney.....	85
Connecticut & Passumpsic Riv.....	Bennington.....	Rutland.....	55
Vermont Valley.....	White R. Junction.....	North Derby.....	110
Cheshire.....	".....	Brattleboro.....	24
Boston, Concord, & Montreal.....	".....	Windsor.....	26
Concord & Portsmouth.....	Concord.....	Fitchburg, via Keene.....	64
Northern (N. H.).....	".....	Littleton.....	113
Manchester & Lawrence.....	Manchester.....	Portsmouth.....	50
Concord & Claremont.....	Concord.....	White R. Junction.....	69
Dover & Winthrop.....	Dover.....	Nashua.....	35
Maine Central.....	Concord.....	Lawrence.....	26
Androscoggin.....	Dover.....	Bradford.....	33
Portland & Kennebec.....	Brunswick.....	Alton Bay.....	33
Portland, Saco, & Portsmouth.....	Portland.....	Portland, via Leeds.....	138
		Farmington.....	63
		Skowhegan, via Augusta.....	100
		Portland.....	52

TABLE OF CHIEF NAVIGABLE RIVERS.

The Otter (length 90 miles) navigable for large vessels to Vergennes, 8 miles.
 " St. Croix " 75 " " " " Calais, 12 "
 " Penobscot 275 " " " " Bangor, 60 "
 " Kennebec 200 " " " " vessels to Hallowell, 40 "
 " Merrimac 110 " " " " vessels to Haverhill, 15 "

Travels, Voyages, etc.—By what railroad can you go from Montreal to Portland? What is the distance? By what railroad can you go from Montreal to Rouse's Point? What is the distance? From Rouse's Point to Windsor, Vt.?

What two places are connected by the Rutland and Burlington railroad? By the Rutland and Washington? By what railroad can you go from Concord to Littleton? What railroad connects White River Junction with Concord? By what two railroads can you go from Bangor to Portland? What railroad connects Portland with Skowhegan? What capital is on this railroad?

To what place is the Penobscot River navigable for large vessels? How many miles is Bangor from the mouth of the river? How many miles is the Kennebec navigable for sloops? To what place? Can you go by water from Burlington to Quebec? Through what bodies of water would you pass? Can you return by railroad? How far is the Merrimac navigable for large vessels? On what waters would you sail, in going from Bangor to Newburyport?

MASSACHUSETTS, RHODE ISLAND, CON-
NECTICUT.

LESSON LXXV.

PHYSICAL GEOGRAPHY.

Surface.—These three states constitute the southern part of New England. The general slope of the country is toward the south, as is shown by the course of the rivers, which all belong to the Atlantic system. In the west, the surface is mountainous; in the central and eastern sections, hilly; near the coast it is level, and in the south-eastern part sandy. There are no large lakes, but the country is dotted with beautiful ponds. Much of the soil requires hard labor to make it productive.

Mountains.—The Green Mountains, on crossing the Massachusetts line from Vermont, divide into two ranges.

The more westerly of these, called the Tagbanic Range, is the higher of the two. It lies on the boundary between Massachusetts and New York, and stretches south-westerly toward the Hudson River. Saddle Mountain and Mt. Washington are its principal peaks.

The eastern range, distinguished as the Hoosick, runs parallel to the Connecticut River, bounding its picturesque valley on the west, and extending southward into the state of Connecticut, where it terminates in lower ridges and detached elevations.

Bays.—The Atlantic coast of this section is indented with numerous bays, affording good harbors and excellent commercial facilities. On the shore of one of these indentations, Plymouth Bay, the Pilgrims landed in 1620, and commenced the earliest permanent settlement in New England. The town of Plymouth now marks the spot, and the "Forefathers' Rock," on which they disembarked, may still be seen.

Near the shore of Narragansett Bay, in the vicinity of Bristol, is Mount Hope, memorable, with the adjacent region, for having been the scene of conflicts in King Philip's War, in colonial times.

The Connecticut Valley.—Among the most fertile districts of this section, is the Connecticut Valley, about 40 miles wide. Mounts Tom and Holyoke, standing as sentinels on either side, afford fine views of its beautiful scenery.

The Connecticut is the longest river of New England. Its Indian name *Quonektacut*, from which its present name is derived, signifies *the long river*.

Manufactures.—This is the great manufacturing region of the U. S. The falls and rapids of its numerous rivers afford unrivaled water-power, and the industry and inventive genius of the people have made the most of this natural advantage. The busy loom furnishes employment to thousands, and the most ingenious machinery has been contrived to aid them in their work. Hence the thriving villages, towns, and cities, that line the banks of the New England streams. It is to manufactures that Lowell and Lawrence on the Merrimac, Fall River and Taunton on the Taunton, Pawtucket on a river of the same name, and many other of the flourishing towns of these states, owe their substantial growth.

LESSON LXXVI.

Questions on Map of U. S. No. 2.

Latitude.—Between what degrees of latitude is Connecticut situated? *Between about 41° and 42° N. lat.* What state on the Pacific coast is in the same latitude? *The northern part of California.* What country on the coast of Europe is in the same latitude as Connecticut? *The northern part of Portugal.* What country in western Asia? *The northern part of Turkey.* What city in Europe is in about the same latitude as Providence? *Rome, in Italy.*

Longitude.—Between what degrees of longitude does Massachusetts lie? *Between about 69° and 73½° W. lon.* Which state alone extends further east? What country in the southern part of South America lies in the same longitude as Massachusetts? *Chili.*

Exercise with Scale of Miles.—What is the distance across Massachusetts, from Plymouth Bay to the western boundary line? What, from Connecticut to Vermont? What is the distance, in a direct line, from Boston to New Bedford? From Boston to New Haven? What is the length of Connecticut from E. to W.? Of Rhode Island from N. to S.? Of Long Island?

Islands.—What bays indent the shores of Long Island? How is Huntington situated? East Hampton? Rockaway? Jamaica? How is Coney Island situated? What two islands lie near the eastern end of Long Island? What island not far from Stonington? To what state does Fisher's Island belong?

General Questions.—Where is Saddle Mountain? Mt. Washington, of the Taghican Range? Wachusett Mt.? Blue Mt.? What capes are at the entrance of Narragansett Bay? What sounds lie north-west and north-east of Martha's Vineyard? What islands between Buzzard's Bay and Vineyard Sound? What channel between Martha's Vineyard and Nantucket? Name the two principal places on Martha's Vineyard. What place is on Nantucket?

Small Maps.—Name the places that lie immediately around Boston, beginning with Charlestown. Between the mouths of what two rivers does Charlestown lie? What peninsula is near Lynn? For what is Nahant noted? *For being a popular watering-place.* On what river is Providence? What places are in the vicinity?

LESSON LXXVII.

REFERENCE TABLE OF PRINCIPAL RAILROADS.

Name.	Where from.	Where to.	Miles.
Eastern.	Boston	Portsmouth, via Lynn.	56
Boston & Maine.	"	South Derry, via Yal-	74
Lowell, Nashua & Lowell, and Wilton.	"	den & Lawrence.	
Fitchburg.	"	Wilton.	55
Boston & Albany.	"	Fitchburg, via Concord.	50
Boston, Hartford, & Erie.	"	Albany, via Worcester.	200
Boston & Providence.	"	Southbridge.	43
Old Colony & Newport.	"	Providence, via Mansfield.	70
Plymouth & S. Braintree.	"	Newport, via Fall River.	67
Cape Cod.	"	Plymouth.	37
New Bedford & Taunton, and Taunton Branch.	"	Hyannis.	79
Stonington & Providence.	New Bedford.	Mansfield.	31
Harf'd, Providence, & Fishkill.	Providence	New London.	62
Providence & Worcester.	"	Waterbury.	123
Worcester & Nashua.	"	Worcester.	43
Norwich & Worcester.	Worcester.	Nashua.	46
New London Northern, & Amherst & Belchertown.	"	Norwich.	60
Shore Line.	New London.	Grout's Corner.	100
N. Haven, Hartford, & Springfield.	New Haven.	New London.	50
Canal, & New Haven & Northampton.	"	Springfield.	62
New York & New Haven.	"	Northampton, via Granby.	76
Naugatuck.	"	New York.	76
Housatonic.	Bridgeport.	Winsted.	61
Connecticut River.	"	Pittsfield.	110
Vermont & Massachusetts.	Springfield.	Brattleboro.	60
Long Island.	Fitchburg.	Greenport.	69
South Side.	Hunter's Point.	Greenport.	95
	Jamaica.	Babyon.	27

TABLE OF CHIEF NAVIGABLE RIVERS.

The Charles (length 55 miles)	is navigable for sloops to Watertown, 7 miles.
" Taunton " 50 "	" " Taunton, 20 "
" Thames " 14 "	" " " " " 14 "
" Connecticut " 410 "	" " Hartford, 150 "
	by the aid of canals to Newbury-Vt., 270 "
" Housatonic " 150 "	is navigable " Derby, 14 "

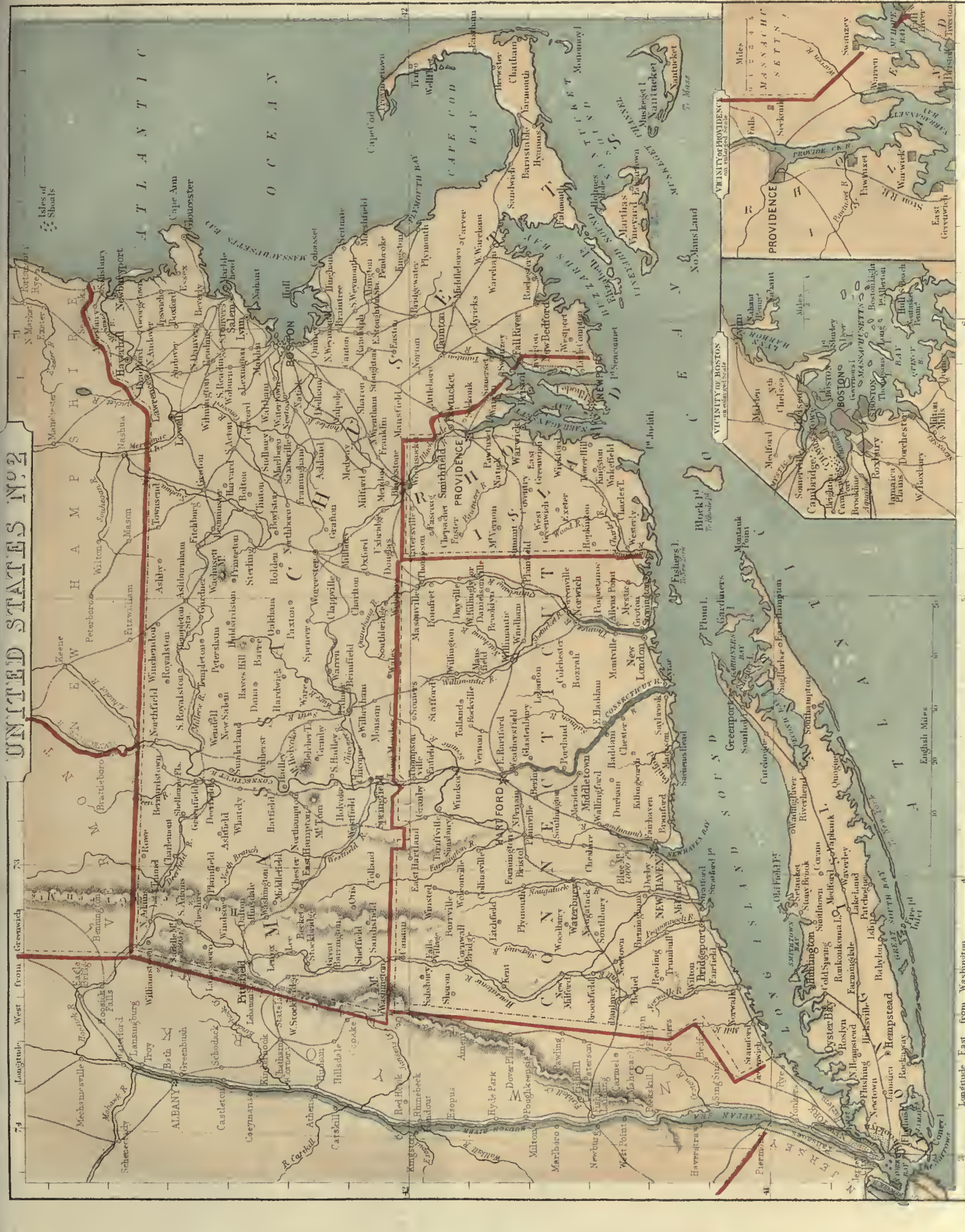
Travels, Voyages, etc.—What do you observe on the Map constructed by the side of many rivers? Mention some of the rivers in Map No. 2, that have railroads on their banks. Why, do you suppose, are railroads thus carried along on the banks of rivers? What city is the great railroad center of eastern Massachusetts? Of Rhode Island? Of southern Connecticut?

By what railroad can you go from Boston to Portsmouth? What is the distance? What railroad connects Boston with Albany? What is the distance between these cities? By what railroad are Boston and Providence connected?

What is the distance by railroad from Providence to New London ?
On what waters would you sail in going from Stonington to New
York ? By what railroads is Hartford connected with New York ?
By what railroads is Hartford connected with Boston ?

On what waters would you sail, to go from Hartford to New York? To what place is the Connecticut navigable for sloops? On what waters would you sail from Norwich to Newport? From Newport to New Bedford?

To what place is the Thames River navigable? How far is Norwich from the mouth of this river? On what waters would you sail on a voyage from Boston to New York, by way of Long Island Sound? What islands would you pass?





NEW YORK, NEW JERSEY, PENNSYLVANIA.

LESSON LXXVIII.

PHYSICAL GEOGRAPHY.

Surface.—As regards surface, the states represented on Map No. 3 may be divided into three distinct regions; viz., the Atlantic plain, adjacent to the coast, the central mountainous district, and the north-western section, partly plateau and partly undulating, with a general slope toward the great lakes and the Ohio. The Atlantic plain gradually increases in width, from a few miles in south-eastern New York, where it is narrowest, to 125 miles in southern Pennsylvania.

Mountains.—The Appalachian system of mountains traverses Pennsylvania in a north-easterly direction, in two principal ranges, nearly parallel. The more easterly of these, distinguished as the Blue Ridge, passes through north-western Jersey, crosses the Hudson, constituting its grand and picturesque Highlands, and finally runs into the Taghanic chain. The western range approaches the Hudson higher up in the bold Catskills.—In Pennsylvania the Appalachian range attains its greatest width, about 200 miles.

The Adirondacks, a detached group in northern New York, contain Mt. Marcy, 5,467 feet high, the loftiest summit in the state.

Rivers.—The rivers of this section belong to three different systems,—the Atlantic, the St. Lawrence, and the Mississippi. Of the first class, the Hudson, Delaware, and Susquehanna are the largest; the numerous streams of northern and north-western New York belong mostly to the second class; while the Alleghany and Monongahela, with their branches, form the third.

Lakes.—New York is noted for its fine lakes. South of Lake Ontario we have one series, and on the western slope of the Adirondacks another, both belonging to the St. Lawrence system. Connected with this system, also, are Lakes George and Champlain: the former is famous for its beauty; the latter, with the Richelieu River, Whitehall Canal, and Hudson River, forms an unbroken water connection between Canada and the metropolis of the state.

Lake Ontario, though the smallest of the five great lakes, considerably exceeds in size the whole state of Connecticut. It is navigable in all parts for the largest vessels.

Coal Regions.—Pennsylvania contains the most productive coal-fields in the U. S., inexhaustible in their supplies of both anthracite and bituminous coal. The principal anthracite or hard coal region lies between the Delaware and the Susquehanna, about the upper waters of the Schuylkill and Lehigh Rivers. Bituminous or soft coal abounds in the western part of the state, in the neighborhood of Pittsburgh; also near Blossburg, in the northern part.

Its abundance of coal has enabled Pennsylvania to take the lead in the manufacture of iron, which has added much to the wealth and prosperity of the state.

Great Cities.—In this section are the three largest cities of the U. S.,—New York, Philadelphia, and Brooklyn. New York owes its greatness to its commerce, being the depot, not only of its own state, but of the northern part of the Mississippi basin, with which it is connected by railroad, and also by the great lakes, the Erie Canal, and the Hudson River. Manufacturing industry and an extensive inland commerce have made Philadelphia the second city in the Union.

LESSON LXXIX.

Questions on Map of U. S. No. 3.

Latitude.—Between what degrees of latitude is New York situated? *Between 40½° and 45° N. lat.* What do we find in the same latitude on the Pacific coast? *Oregon and the northern part of California.* What countries on the coast of Europe are in the same latitude as New York? *The northern part of Spain and Portugal.* What European city is in nearly the same latitude as N. Y.? *Naples.*

Longitude.—Between what degrees of longitude is New York? *Including Long Island, it lies between 72° and about 80° W. lon.* What states extend farther east? What countries on the coast of South America lie in the same longitude as New York? *The western part of Venezuela, and the United States of Colombia.*

Exercise with Scale of Miles.—What is the length of New York on the parallel of 42°? What is its extreme breadth? What is the length of N. Jersey? What, of Pennsylvania? What, its breadth? What is the distance in a direct line between New York and Philadelphia? Between Philadelphia and Pittsburgh?

General Questions.—Where is Barnegat Inlet? Sodus Bay? Grand Island? Chestnut Ridge? Laurel Ridge? Broad Mountain? Where are the Thousand Isles? Schooley's Mountains? Bald Eagle Mountains? Where is Titusville? Oil City? Mention the lakes that lie west of the Adirondacks. Mention those east of the Adirondacks. On what lake is Cooperstown?

REFERENCE TABLE OF PRINCIPAL RAILROADS.

Name.	Where from.	Where to.	Miles.
Plattsburg & Montreal.....	Plattsburg.....	Montreal.....	62
New York & Harlem.....	New York.....	Alb'y & Troy, via White Plains	157
Hudson River.....	".....	Albany & Troy.....	150
New York & Erie.....	".....	Dunkirk.....	459
Buffalo Div. of N. Y. & Erie.....	Cornlng.....	Buffalo.....	142
N'western Div. of N. Y. & Erie.....	Hornellsville.....	".....	91
New York Central.....	Albany & Troy.....	Buffalo, via Rochester.....	298
N. Y., Athens, & Schenectady Div.....	Schenectady.....	Athens.....	41
Anburn Division.....	Syracuse.....	Rochester, via Auburn.....	104
Syracuse, Binghamton, & N. Y.....	".....	Binghamton.....	80
Oswego & Syracuse.....	".....	Oswego.....	35
Buffalo & Erie.....	Buffalo.....	Lewiston.....	28
Buffalo, Niagara Falls, & Lewiston.....	Buffalo.....	Erie.....	88
Black River & Utica.....	Utica.....	Boonville.....	35
Rome, Watertown, & Ogdensburg.....	Rome.....	Ogdensburg, via Watertown.....	142
Ogdensburg & Lake Champlain.....	Ogdensburg.....	Ron-c's Point.....	118
Rensselaer & Saratoga.....	Troy.....	Rutland, via Saratoga.....	95
Troy & Boston.....	".....	North Adams.....	48
Albany & Susquehanna.....	Albany.....	Harpersville.....	120
N. Jersey, Philadelphia & Trenton.....	New York.....	Philadelphia.....	90
Camden & Amboy.....	South Amboy.....	".....	63
Northern of New Jersey.....	New York.....	Piermont.....	25
Central of New Jersey.....	".....	Easton, via Somerville.....	75
Morris & Essex.....	".....	"..... via Morristown.....	83
Delaware, Lackawanna, & Western.....	".....	Grant Bend.....	190
Lehigh Valley.....	Easton.....	Scranton.....	120
Lackawanna & Bloomsburg.....	Scranton.....	Northumberland.....	80
Philadelphia & Erie.....	Philadelphia.....	Erie, via Sunbury.....	451
North Pennsylvania.....	".....	Berthelam.....	54
Belvidere, Del., & Flemington.....	".....	Manunkachunk.....	98
Phil., Wilmington, & Balt.....	".....	Baltimore.....	98
Phil. & Baltimore Central.....	".....	Rising Sun.....	57
Catawissa.....	".....	Williamsport, via Tamaqua.....	197
Pennsylvania Central.....	".....	Pittsburgh.....	355
Bald Eagle Branch.....	Tyrone.....	Sonbury, via Williamsport.....	120
Western Pennsylvania Br.....	Blairsville Int.....	Alleghany City.....	67
Alleghany Valley.....	Pittsburgh.....	Brady's Bend.....	69
Pittsburgh & Connelleville.....	".....	Uniontown.....	72
Philadelphia & Reading.....	Philadelphia.....	Pottsville, via Reading.....	98
Lebanon Valley Branch.....	Reading.....	Harrisburg.....	54
Reading & Columbia.....	".....	Columbia.....	46
East Pennsylvania.....	".....	Allentown.....	86
Cumberland Valley.....	Harrisburg.....	Hagerstown.....	74
Schuylkill & Susquehanna.....	Auburn.....	Columbia.....	59
Raritan & Delaware Bay.....	Port Monmouth.....	Philadelphia.....	94
Camden & Atlantic.....	Camden.....	Atlantic City.....	60
W. Jersey, Millville & Glassboro, C. May.....	".....	Cape May.....	84
Northern Central.....	Baltimore.....	Cavandagua.....	325

TABLE OF CHIEF NAVIGABLE RIVERS.

The St. Lawrence (length 770 miles) is navigable for ships to Montreal, and by the aid of canals to Lake Ontario.....	770 miles.
" Hudson (length 300 miles) is navigable for large ships to Hudson (117 miles), and for steamboats to Troy.....	151 "
" Raritan (length 33 miles) is navigable for steamboats to New Brunswick.....	15 "
" Delaware 300 " " " " Trenton.....	75 "
" Monongahela (length 300 miles) is navigable for steamboats to Fairmount.....	150 "
" Alleghany 300 " " " " Ocean.....	260 "

Voyages, Travels, etc.—What railroad connects Troy and Buffalo? Philadelphia and Pittsburgh? New York and Dunkirk? By what two railroads can one go from New York to Albany? What railroads would one take in going from Philadelphia to Saratoga Springs? In going from Poughkeepsie to Trenton Falls?

DELAWARE, MARYLAND, VIRGINIA, W. VIRGINIA, N. & S. CAROLINA.

LESSON LXXX.

PHYSICAL GEOGRAPHY.

Surface.—We now cross Mason and Dixon's line (the boundary between Pennsylvania and Maryland), so called from two eminent English mathematicians by whom it was drawn.

West of the Atlantic plain, which here widens toward the south, the Appalachian Mountains traverse this section, as they do Pennsylvania, in several parallel ranges, forming a belt from 80 to 100 miles wide. They attain their greatest height in North Carolina, where Mt. Mitchell rears its head 6,732 feet above the level of the sea,—the loftiest peak east of the Rocky Mountains. It belongs to the Black Mountains, a group so called from the dark foliage of the firs and other evergreens that cover their sides.

Rivers.—The rivers of these states belong to the Atlantic and Mississippi systems, the Appalachian Mountains forming the watershed. Those of North and South Carolina rise in the easternmost range, or Blue Ridge; but most of the streams north of these states have their source in one of the more westerly ranges, and make their way through the Blue Ridge in picturesque gorges.

Rapids or falls occur in these rivers where they descend from the highlands on their way to the coast, and to this point they are mostly navigable. Many of the rivers of Carolina, however, have their mouths so obstructed by sand-banks as to be inaccessible to large vessels.

Atlantic Coast.—The Atlantic coast, in the northern part of this section, is indented with numerous bays, abounding in fine fish and oysters. In all parts, it is lined with a chain of low sandy islands, cutting off a series of shallow sounds. The inlets that connect these with the ocean are constantly changing, the old ones filling up with shifting sands, and new ones being opened by the beating of the surge.

The Hatteras Banks, which enclose Pamlico Sound, extend far out into the ocean, terminating in Cape Hatteras, the most dangerous point to navigators on the coast. The names of Cape *Lookout* and Cape *Fear*, projecting farther south-west from the same sandy deposit, show that the danger is not confined to this point.

Many of the islands off the South Carolina coast are cultivated, and produce the famous sea-island cotton.

Swamps.—Much of the country adjacent to the coast consists of swamp-land interspersed with small lakes. Dismal Swamp, an extensive tract of this character, lies in south-eastern Virginia and the north-eastern part of North Carolina. It is covered with a black soil consisting of vegetable matter, and produces a thick growth of reeds, ferns, and aquatic trees. Cedars and cypresses abound.

Productions.—The climate of this section, removed alike from extremes of heat and cold, is in the highest degree genial and favorable to agricultural pursuits. In the north we have the great tobacco-bearing region, in the south that of rice,—while Indian corn and wheat flourish in almost every part.

From the North Carolina coast we obtain our chief supplies of turpentine and resin, made from the sap of the long-leaved pines which there abound. Their straight trunks rise without a limb from twenty-five to thirty feet, at which height they branch out, nearly excluding the light of day with their thick evergreen foliage.

LESSON LXXXI.

Questions on Map of U. S. No. 4.

Latitude.—Between what degrees of latitude are Virginia and W. Virginia? *Between 36½° and about 40½° N. lat.* What countries on the coast of Europe are in the same latitude? *The central and southern parts of Spain and Portugal.* What country in western Asia? *Asia Minor.* What city on the Pacific coast is in nearly the same latitude as Richmond? *San Francisco, in California.*

Longitude.—Between what degrees of longitude is Virginia? *Between about 75½° and 83½° W. lon.* What island of the West Indies lies in the same longitude? *Cuba.* What South American city is in nearly the same longitude as Washington? *Lima (le'mah), in Peru.*

Exercise with Scale of Miles.—What is the length of Virginia along the southern boundary line? Of Delaware from N. to S.? Of N. Carolina, from E. to W.? Of S. Carolina? Of West Virginia, from N. to S.? What is the distance in a direct line from Baltimore to Wheeling? From Richmond to Charleston?

Islands, Mountains.—What island is near the entrance to Albemarle Sound? For what is it memorable? *For having been the site of the first English settlement in America.* What island is off the mouth of the Cape Fear River? Where is Edisto Island? Where are the Kittatinny Mountains? The Greenbrier Mountains? The Peaks of Otter? Where is Mitchell's Peak situated?

Bays, Sounds, etc.—How is Pocomoke Bay situated? Raleigh Bay? Onslow Bay? Long Bay? Winyaw Bay? St. Helena Sound? Port Royal Entrance? What inlet leads into Pamlico Sound? What bay projects from the coast of South Carolina? Where is Hilton Head? Lexington? Lake Drummond?

REFERENCE TABLE OF PRINCIPAL RAILROADS.

Name.	Where from.	Where to.	Miles.
Delaware	Wilmington...	Crisfield.....	135
Baltimore & Ohio.....	Baltimore.....	Wheeling, via Cumberland.....	379
..... (Wash. Branch)		Washington.....	40
Winchester & Potomac.....	Harper's Ferry.....	Winchester.....	32
North-western Virginia.....	Grafton.....	Parkersburg.....	104
Richmond, Fredericksburg, & Potomac.....	Richmond.....	Aquia Creek.....	75
Orange & Alexandria.....	Alexandria.....	Lynchburg.....	171
Alexandria, Loudon, & Hampshire.....		Leesburg.....	38
Manassas Gap.....	Manassas Junc.....	Mount Jackson.....	112
Virginia Central.....	Richmond.....	Covington.....	205
Richmond & Petersburg.....		Petersburg.....	22
Richmond & Danville.....		Greensboro.....	189
Petersburg & Weldon.....	Petersburg.....	Weldon.....	64
Norfolk & Petersburg.....		Norfolk.....	81
Seaboard & Roanoke.....	Weldon.....	Portsmouth.....	80
Petersburg & Lynchburg (S. S.).....	Petersburg.....	Lynchburg.....	123
Virginia & Tennessee.....	Lynchburg.....	Bristol, Tenn.....	204
Raleigh & Gaston.....	Raleigh.....	Weldon.....	97
Wilmington & Weldon.....	Weldon.....	Wilmington.....	162
..... " Manchester.....	Wilmington.....	Kingsville, via Florence, S. C.....	171
Wilmington, Charlotte, & Rutherford.....		Sand Hill.....	110
North Carolina.....	Goldsboro.....	Charlotte, via Raleigh.....	223
Atlantic & North Carolina.....		Morehead City.....	95
Western (N. C.).....	Salisbury.....	Head of Road.....	78
North-eastern.....	Charleston.....	Florence.....	102
Cheraw & Darlington.....	Cheraw.....		40
South Carolina.....	Charleston.....	Augusta.....	137
..... " Columbia Branch.....	Branchville.....	Columbia.....	68
Charlotte & South Carolina.....	Columbia.....	Charlotte.....	109
Greenville & Columbia.....		Greenville.....	144
Spartanburg & Union.....	Spartanburg.....	Alston.....	68
Blue Ridge.....	Anderson.....	Walhalla.....	33
Charleston & Savannah.....	Charleston.....	Sakelathatchie.....	50

TABLE OF CHIEF NAVIGABLE RIVERS.

The Potomac (length 550 miles) is navigable for ships of the line to Washington.....	300 miles.
" Rappahannock (length 125 miles) is navigable to Fredericksburg.....	85 "
" York (length 40 miles) is navigable for large vessels.....	40 "
" James " 500 " " " steamboats to Richmond.....	110 "
" Chowan " 50 " " " sloops.....	50 "
" Roanoke " 260 " " " steamboats to Weldon.....	150 "
" Tar " 200 " " " " Tarborough.....	85 "
" Neuse " 300 " " " " Waynesborough.....	120 "
" Cape Fear (length 200 miles) is navigable for steamboats to Fayetteville.....	125 "
" Great Pedee is navigable for small vessels.....	130 "
" Santee (length 150 miles) is navigable for steamboats to Columbia & Camden.....	230 "
" Savannah " 450 " " " " Augusta.....	230 "

Travels, Voyages, etc.—By what railroad are Baltimore and Wheeling connected? What is the distance? Through what states and places does this railroad run? What is the distance by railroad from Baltimore to Washington? What railroad connects Weldon and Portsmouth? Lynchburg and Bristol? Goldsboro and Morehead City? Charleston and Augusta? Harper's Ferry and Winchester? On what waters would you sail in going from Savannah to Washington? From Portsmouth to Baltimore? How far is the Potomac navigable?

UNITED STATES No 4



TENNESSEE, GEORGIA, FLORIDA, ALA-
BAMA. MISSISSIPPI.

LESSON LXXII.

PHYSICAL GEOGRAPHY.

Surface.—We have in these states the southern extremity of the great Appalachian chain. Two parallel ranges traverse East Tennessee, having a width of over 50 miles, varying from one to two thousand feet in height, wooded to their tops, and embosoming delightful valleys.

The Appalachian system terminates in northern Alabama and Georgia, in broken ridges, nowhere of great elevation. These ridges separate the waters of the Tennessee from the tributaries of the Atlantic and the Gulf of Mexico, which drain the southern slope of these states. For a distance of over 50 miles from the coast we have a level strip, sandy in parts and in parts swampy.

The western portion of this section, sloping from a tableland of moderate elevation toward the Mississippi River, terminates in bluffs of irregular outline, which in some places come close to the river's edge and in others are separated from it by a strip of rich alluvium.

Rivers.—With the exception of some rivers of Georgia and Florida, which empty into the Atlantic, the streams of this section discharge their waters into the Gulf of Mexico, either directly or through the Mississippi.

To the latter class belongs the Tennessee, which twice crosses the state of that name, besides traversing northern Alabama. Steamboats ascend the Tennessee to Florence, where the Muscle Shoal Rapids, extending for a distance of 20 miles, obstruct navigation; beyond the rapids it is again navigable for 500 miles, to Knoxville. Thousands of wild geese and ducks congregate to feed on the shell-fish from which the Muscle Shoals receive their name.

Islands.—The coast, both on the Atlantic and the Gulf, is lined with low islands or keys, separated from the shore by a series of sounds. The islands of Georgia, like those of S. C., are valuable for their long-staple cotton. Many of the islands on the Florida coast are of coral formation.

Swamps.—Swamps abound near the coast. One of the largest of these is Okefinokee Swamp in south-eastern Georgia, interspersed with islands which are covered with vines, bay-trees, and underbrush, and inhabited by alligators, frogs, lizards, and cranes.

The Everglades, in the interior of Southern Florida, are of a similar character. They consist of a vast lake, studded with thousands of islets covered with tangled thickets or pines and palmettoes. The water is from one foot to six feet deep, and is almost hidden by the rank tall grass that grows from the vegetable deposit at the bottom.

Productions.—This section is, for the most part, blessed with a delightful climate and a highly productive soil. The alluvial lands bordering on the Mississippi, are of inexhaustible fertility.

In the southern part, which lies within a few degrees of the torrid zone, the climate is hot; but the moisture with which the atmosphere is imbued from the Gulf and the Atlantic, modifies the temperature and prevents the soil from becoming parched. Vegetation is exceedingly luxuriant, the forests often presenting an unbroken wall of foliage. Here the magnolia and palmetto, the box-wood and cypress flourish; also the live-oak, yielding the most valuable timber for ship-building.

LESSON LXXIII.

Questions on Map of U. S. No. 5.

Latitude.—Between what degrees of latitude does Alabama lie? *Between about 30½° and 35° N. lat.* What state on the Pacific coast is in the same latitude? *The southern part of California.* What part of the eastern continent is in the same latitude? *The northern part of Africa.* What cities of Asia are in about the same latitude as Savannah? *Nankin, in China, and Jerusalem.*

Longitude.—Between what degrees of longitude is Alabama? Between 85° and $88\frac{1}{2}^{\circ}$ W. lon. Does any part of South America extend as far west? What state in the north of the Union lies in the same longitude? *The western part of Michigan.* What bay in British America? *Hudson Bay.*

Exercise with Scale of Miles.—What is the distance from the mouth of the Savannah to the Mississippi in a direct line? What three states does this line cross? What is the distance in a straight line from the Tennessee to the Gulf of Mexico? What is the greatest length of Tennessee from E. to W.? What is its width?

Islands, Capes.—Where is Ossabaw Island? Amelia Island? Anastasia Island? Santa Rosa? Dauphin Island? Ship Island? How are the Chandeaur Islands situated? The Cedar Keys? Describe the situation of Cape St. George. Of Mobile Point.

Important Places.—Name the principal places on the Cumberland River. On the Tombigbee. On the Chattahoochee. On the St. John's. How is Jonesboro situated? McMinville? Brandon? Talladega? Andersonville? Lake City? In which three of these states is there a place called Athens? In which three, a place called Columbus? What place is near the mouth of the Black Warrior? Of the Cahawba?

Rivers.—Which is the longest river in Alabama? *T.* What is its principal branch? With what river does the Tombigbee unite, to form the Mobile? What river is the outlet of several little lakes in Okefinokee Swamp? What rivers empty into Mississippi Sound?

General Questions.—What lakes are in the north-eastern part of Florida? What inlet on the eastern coast of Florida? How is St. Andrew's Bay situated? Santa Rosa Bay? Mississippi Sound? What mountains traverse Tennessee? What mountains lie on its eastern boundary? Where is Dalton? American?

REFERENCE TABLE OF PRINCIPAL RAILROADS.

Name.	Where from.	Where to.	Miles.
Georgia.	Augusta.	Atlanta	171
Athens Branch.	Union Point.	Athens	40
Western & Atlantic.	Albany.	Chattanooga	178
Atlanta & West Point.	"	West Point, Ga.	187
Macon & West.	"	Macon	103
Central Georgia.	Macon	Savannah	180
Milldegeville and Eatonton Br.	Gordonsville.	Eatonton	28
Augusta & Savannah.	Augusta.	Millen	53
Atlantic & Gulf.	Savannah	Waynes	821
South-western	Macon	Euclid	143
Muscogee	Fort Valley	Columbus	71
Florida.	Central.	St. Marks	22
Pensacola & Georgia.	Tallahassee	Union Springs	52
Tallahassee	Jacksonville	Cedar Keys	99
Mobile & Gard.	Lake City	Lake City	60
Mobile	Tallahassee	Quincy	130
" Ohio.	Girdard	St. Marks	22
Selma, Rome, & West Point.	Mobile	Union Springs	52
Montgomery & West Point.	Selma.	Columbus, Ky.	472
Alabama & Florida.	Montgomery	Blue Mountain	135
Vicksburg & Meridian.	Vicksburg.	West Point, Ga.	88
New Orleans, Jackson, and Great Northern.	New Orleans.	Carpenter's.	161
Mississippi & Tennessee.	Canton.	Meridian	140
Memphis & Louisville.	Grenada.	Canton, Miss.	206
Nashville & Chattanooga	Memphis.	Jackson, Tenn.	226
McMinnville & Manchester.	"	Grenada.	49
Nashville & Decatur.	Nashville.	Louisville.	377
East Tennessee & Virginia	Bristol.	Stevens.	271
Georgia Branch.	Cleveland	Chattanooga	151
		McMinnville	35
		Decatur, Ala.	122
		Knoxville.	130
		Chattanooga	112
		Dalton, Ga.	28

TABLE OF CHIEF NAVIGABLE RIVERS.

The Oreechoe (length 250 miles) is navigable for sloops,	30 miles.
" Alamaba " " " " steamboats	140 "
" Ocmulgee " " " " " to Macon.	125 "
" Oconee " " " " " to Milledgeville.	100 "
" St. John's " " " " " Lake George.	107 "
" Appalachicola and Chattahoochee (length 650 miles) are navigable for steamboats to Columbus, Ga.	350 "
" Flint (length 300 miles) is navigable for steamboats to Albany (from the Gulf).	250 "
" Mobile and Tombigbee (length 550 miles) are navigable for large steamboats to Columbus, Miss.	556 "
" Alabama (length 380 miles) is navigable for large steamboats	380 "
" Black Warrior " " " " " to Tuscaloosa.	150 "
" Pascagoula (length 75 miles) is navigable for small vessels.	75 "
" Yazoo (length 290 miles) is navigable for large steamboats.	290 "
" Tennessee and Holston (length 1,200 miles) is navigable for steamboats to Knoxville, except for 20 m. at Muscle Shoals	750 "

Travels, Voyages, etc.—What city is the chief railroad center of Tennessee? What two places are the principal railroad centers of Georgia? *A. and M.* Of Mississippi? *J. and M.* By what railroad can you go from Atlanta to Augusta? From Mobile to Corinth? From Jackson to New Orleans? From Knoxville to Chattanooga? On what waters would you sail in going from Savannah to Jacksonville? From St. Marks, Fla., to Mobile? From Florence, Ala., to Yazoo City, Miss.?

UNIONED STATES IN 3



UNITED STATES No. 6

Longitude West from Greenwich 90

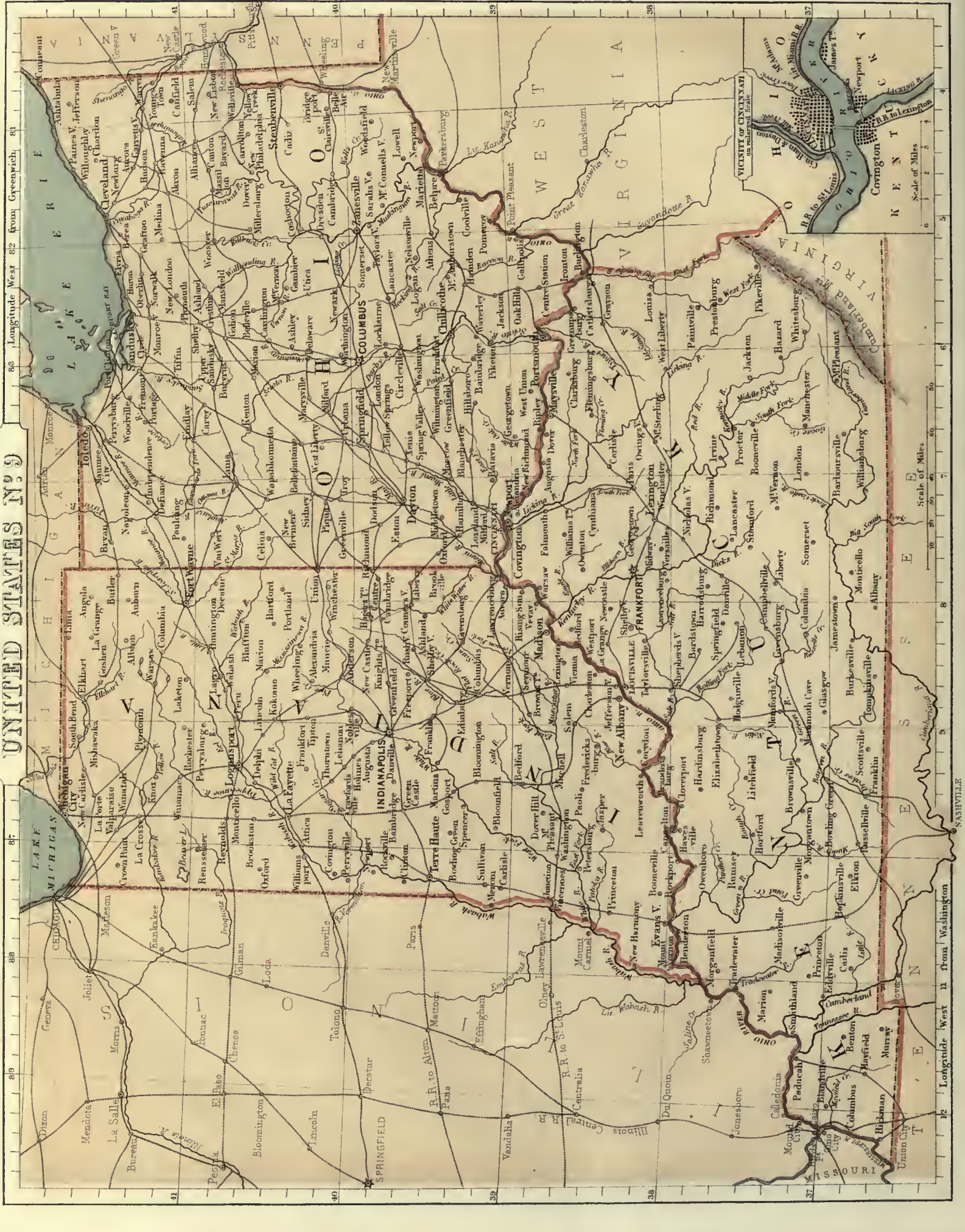




UNITED STATES N.9

Longitude West 82 from Greenwich 81

Longitude West 12 from Washington 12



INDIANA, OHIO, KENTUCKY.

LESSON XC.

PHYSICAL GEOGRAPHY.

Surface.—This section forms part of the fine valley of the Ohio. It has no mountains, except in south-eastern Kentucky, which is traversed by outlying ridges of the Cumberland range. Much of the country is table-land of moderate height; which attains an elevation of one thousand feet in Ohio, where a low ridge north of the center separates the tributaries of Lake Erie from those of the Ohio River.

Ranges of hills follow the course of the Ohio on both sides at intervals, separated from it in some places by strips of rich and thickly-wooded bottom-land. The general slope of the surface is toward the Ohio.

The Ohio River.—The Ohio (an Indian name, meaning “beautiful river”) is a placid and picturesque stream, from one to three-fourths of a mile in width, having a gentle current of about two miles an hour. Like other western rivers, it becomes so low in seasons of continued drought that large steamboats cannot navigate it throughout its entire course, the difference between high and low water mark being about fifty feet. The area drained by the Ohio and its tributaries is not far from 200,000 square miles.

Lake Erie.—Lake Erie forms most of the northern boundary of Ohio, and is of great value to the state in a commercial point of view, being the seat of an immense trade. It has an area of 9,600 square miles, and a depth not generally exceeding 120 feet, being much shallower than the other Great Lakes.

Lake Erie has an elevation of 565 feet above the sea, and 333 feet above the level of Lake Ontario, this being the descent in the Niagara River. Violent storms are apt to occur in the lake in November and December.

Caves.—This section contains some of the most remarkable caves in the world. The largest is Mammoth Cave in Kentucky, which, with its branches, has probably not less than forty miles of cavernous windings. A river, navigable by boats, furnishes the means of exploring its recesses. Wyandotte Cave, eleven miles from Corydon, in Indiana, almost equals Mammoth Cave in interest.

Mounds.—Numerous artificial mounds and ancient works are found in these states, attributed to a race acquainted

with the industrial arts, who occupied the country before the American Indians.

One of the most remarkable of these is found near Bowling Green, Ky. It consists of a wall of limestone, crossing a neck of land formed by a river-bend, and enclosing a peninsula of 200 acres,—evidently built for purposes of defence.

Soil and Productions.—The soil of this part of the Ohio Valley is deep and exceedingly fertile, particularly in the river-bottoms. Nowhere does Indian corn thrive more luxuriantly. These states are all well adapted to the culture of hemp, in the production of which Kentucky ranks first in the Union.

LESSON XCI.

Questions on Map of U. S. No. 9.

Latitude.—Between what degrees of latitude are Kentucky and Ohio situated? *Between about 36½° and 42° N. lat.* What country on the Atlantic coast of Europe is in about the same latitude? *Portugal.* What island off the Asiatic coast is crossed by parallel 42° N.? *Jesso, one of the Japan Isles.* What city in Asia is about the same latitude as Louisville, in Kentucky? *Smyrna.*

Longitude.—Between what degrees of longitude do Ohio and Kentucky lie? *Between about 80½° and 89½° W. lon.* How many degrees is Columbus east of Indianapolis? What capital of a southern state lies in nearly the same longitude as the capital of Indiana? *Montgomery.* What is the longitude of Louisville?

Important Places.—How is Valparaiso situated? *Veray?* Corydon? *Coshocot?* Gallipolis? *Delaware?* Mt. Sterling? *Cynthiana?* Columbus, Ky.? What place is about midway between Columbus, O., and Chillicothe? *Between Indianapolis and Madison?* Between Frankfort and Louisville? What two places in Kentucky are on the Mississippi River?

What is the southernmost place in Indiana? *In Ohio?* In Kentucky? What place is in the north-eastern extremity of Ohio? Near the borders of what state is Conneaut? What place in West Virginia is opposite Bridgeport, Ohio? *Opposite Belpre, O.?* What place in Kentucky is opposite Burlington, O.?

General Questions.—What rivers rise in the Cumberland Mountains? What rivers empty into the Ohio River from Ohio? From Kentucky? What lake touches Indiana on the north-west? What lake has Indiana on that lake? Where is Sandusky Bay? Beaver Lake? Which extends farther north, Indiana or Ohio? Which, farther south?

Small Map.—What creeks empty into the Ohio near Cincinnati? What river empties into the Ohio directly opposite Cincinnati? What two places are at the mouth of this river? In what state are Corydon and Newport? Where is Mt. Adams? What railroad runs west from Cincinnati, along the Ohio River? What railroad follows the valley of Mill Creek?

REFERENCE TABLE OF PRINCIPAL RAILROADS.

Name.	Where from.	Where to.	Miles.
Indianapolis, Cin., & Lafayette	Cincinnati	Lafayette	179
Indianapolis, Peru, & Chicago	Indianapolis	Peru	75
Bellefontaine	"	Crestline, O.	207
Columbus & Indiana Central	"	Columbus, via Richmond.	188
Second Division	"	State Line.	114
Legansport Division	Un. City Junc.	Legansport	61
Jeffersonville, Ind., & Indian	Indianapolis	Jeffersonville	108
Madison Branch	Columbus	Madison	45
Terre Haute & Indianapolis	Indianapolis	Terre Haute	73
Chicago & Great Eastern	Chicago	Richmond	224
Cin., Richmond, & Chicago	Richmond	Hamilton	45
Evansville & Crawfordsville	Evansville	Rockville	132
Louisville, New Albany, & Chic	New Albany	Michigan City	288
Pittsburgh, Ft. Wayne, & Chic	Chicago	Pittsburgh, via Crestline.	468
Chicago, Cin., & Louisville	La Porte	Plymouth	30
Lake Shore	Toledo	Sandusky	209
Cincinnati, Dayton, & Eastern	Cincinnati	Dayton, via Urbana	116
Sandusky, Mansfield, & Newark	Cleveland	Dayton, via Mansfield	150
Cleveland & Pittsburgh	Pittsburgh	Belle Air	94
River Division	Bayard	New Philadelphia	32
Tuscarawas Branch	Columbus	Crestline	63
Cleveland, Col., & Cincinnati	Columbus	Springfield	50
Springfield Branch	Morrow	Zanesville	132
Cincinnati & Zanesville	Columbus	Pittsburgh	193
Pittsburgh, Col., & Cincinnati	Cincinnati	Belle Air	137
Central Ohio	Dayton	Dayton	60
Cin., Hamilton, & Dayton	Dayton	Toledo	142
Dayton & Michigan	Dayton	Union City	47
Little Miami, & Col. & Xenia	Cincinnati	Columbus, via Xenia	120
Xenia, & Dayton & Western	Xenia	Richmond	57
Marletta & Cincinnati	Marletta	Loreland	173
Portsmouth Branch	Harnden	Portsmouth	418
Atlantic & Gt. Western (consol.)	Cincinnati	Salamanca, N. Y.	50
Cleveland Branch	Leavittsburg	Cleveland	17
Mehoning	Louisville	Youngstown	94
Louisville & Lexington	Louisville	Nashville	185
Louisville & Nashville	Lobnon Junc.	Grab Orchard	83
Lobnon Branch	Covington	Nicholasville	112
Kentucky Central	"	"	"

TABLE OF CHIEF NAVIGABLE RIVERS.

The Manatee (length 100 miles) is navigable for steamboats to Dresden.	60 miles.
" Muskogum (length 110 miles) is navigable for steamboats to Dresden.	95 "
" Seloto (length 200 miles) is navigable for steamboats.	130 "
" Miami	75 "
" Wabash	300 "
" Kentucky	60 "
" Green (length 300 miles) is navigable for steamboats.	200 "
" Cumberland (length 600 miles) is navigable for large steamboats to Nashville.	300 "

Travels, Voyages, etc.—What city is the great railroad center of Indiana? What railroad crosses Ohio, connecting Crestline with Indianapolis? What road connects Columbus with Wheeling? What railroad connects Cincinnati with St. Louis, on the Mississippi? *The Ohio and Mississippi.* What road connects New Albany, on the Ohio, with Michigan City, on Lake Michigan? What place opposite Louisville is connected with Indianapolis by railroad? What two capitals are connected by the Columbus and Indiana Central Railroad?

On what waters would you sail in going from Terre Haute to Cincinnati? From Cincinnati to Zanesville? What railroad connects Louisville and Lexington? What river does it cross? At what city? To what place is the Muskingum navigable? What is the length of the Cumberland? Sailing from Nashville to Cincinnati, what places would you pass that are the terminus of railroads in Indiana? *E., N. A., J., M., A., & L.* What are the two largest rivers wholly within the state of Kentucky?



NEBRASKA, KANSAS, DAKOTA, INDIAN TERR., WYOMING, COLORADO, NEW MEXICO.

LESSON XCII.

PHYSICAL GEOGRAPHY.

Surface.—The western part of this section embraces several ranges constituting the Rocky Mountain System, from the eastern base of which the land gradually slopes toward the Mississippi, with a slight southerly inclination.

In the eastern part there are no mountains; the country is mostly rolling prairie, not thickly wooded, but containing some timber, particularly along the river-banks. This prairie-land gradually rises toward the west to an elevated plateau, which, as it approaches the mountains, becomes dry and sandy, forming an immense barren tract sometimes called the "Great American Desert."

El Llano Estacado.—Of this sterile character is the vast region (nearly as large as the state of New York) called "El Llano Estacado," the *staked plain*, extending from western Texas into the south-eastern part of New Mexico.

This region was so called because, having no other landmarks, the Mexicans who had occasion to cross it drove stakes in the ground to mark out their route. It is entirely destitute of trees, and during much of the year of water also, a scanty growth of grass being all the vegetation it contains.

The Rocky Mountains.—The Rocky Mountains constitute the great natural feature of this section of our country. Traversing the western portion of the United States and British America, they form part of the great chain which, under different names, extends from near the Arctic Ocean to the Strait of Magellan. Their length is not far from 3,000 miles, and their height ranges between 10,000 and 16,000 feet.

Fremont's and Pike's Peak, named after the persons by whom they were first explored, are the highest summits of the Rocky Mountains in the United States. The latter is noted for the rich deposits of gold found in its vicinity.

The ascent of Pike's Peak is very difficult. Two immense gorges extend from the summit almost to the base. The top is covered with blocks of coarse granite, and has an area of about sixty acres. It affords one of the grandest of views, extending nearly a hundred miles in every direction, and embracing the sources of four great rivers,—the Nebraska, the Arkansas, the Rio Grande, and the Colorado.

Rivers.—On glancing at the Map of this section, the eye is at once struck with the numerous rivers wending their way from the mountains or the adjacent table-land, in an easterly or south-easterly course, ultimately to swell the waters of the Mississippi. Most of them, however, are useless for purposes of navigation, being shallow at all times, and in the dry season little more than a succession of pools. Even the Nebraska, or Platte, which is 1,200 miles long, can be forded, except during floods, in almost every part.

The Yellowstone and Arkansas are exceptions to this general rule. The former is the largest, though not the longest, affluent of the Missouri. It is not far from 1,000 miles in length, and is navigable for about three-fourths of its course.

The Arkansas is, next to the Missouri, the chief tributary of the Mississippi, and, being unobstructed by falls or rapids, can be ascended during nine months of the year a distance of 800 miles.

Mauvaises Terres.—*Mauvaises Terres* (*mo-vaze' tare*), *bad lands*, is the name given to a peculiar valley in western Nebraska, about 90 miles long by 30 in width, abruptly depressed from one to three hundred feet below the level of the adjacent table-land. The face of the valley looks as if it had sunk away from the surrounding country, leaving thousands of rugged and gigantic columns standing, which in the distance look like the walls of a ruined city. There are no trees or shrubs, and in summer not a breath of air to relieve the heat reflected from its ash-colored rocks.

Gold Deposits.—New Mexico and Colorado abound in mineral treasures. The gold deposits in Colorado are for the most part found in "lodes,"—that is, in veins between walls of granite, mixed with quartz, copper, and iron pyrites. They are thought to have had their origin far down in the earth, and to have been thrown up by some convulsion of nature through crevices in the granite rocks.

Hunting-grounds.—The prairies of this section have been justly called "the paradise of the hunter and trapper." Herds of buffaloes, still large, though rapidly diminishing, wander over the plains. The Missouri has at times been backed up, as by a dam, by the multitude of these animals crossing the river.

LESSON XCIII.

Questions on Map of U. S. No. 10.

Latitude.—Between what degrees of latitude is Kansas situated? What city on the Atlantic coast is in about the same latitude as Leavenworth? *Baltimore*. Between what degrees of latitude is Nebraska situated? What states on the Atlantic coast lie in the same latitude? What states on the Pacific coast? How many degrees is Golden City north of Santa Fé?

Longitude.—Between what degrees of longitude is Colorado? *Between 102° and 109° W. lon.* Between what meridians does New Mexico lie? What lake in British America lies in the same longitude as eastern Nebraska? *Lake Winnipeg*. What place in Mexico is in nearly the same longitude as Omaha? *V. C.* What is the longitude of Santa Fé?

Exercise with Scale of Miles.—What is the distance in a direct line from Fort Riley to Santa Fé? From Omaha to Yankton? From Fremont's Peak to Pike's Peak? What is the length of Nebraska from east to west? The breadth of Kansas from north to south?

Mountains and Passes.—Where are the Wind River Mountains? What pass is near them? What pass is situated south-east of this? What pass is on the southern boundary of New Mexico? *El Paso*. By which of these passes will the Union Pacific R. R. cross the Rocky Mountains? *By Bridger's Pass*. Describe the situation of the Moro Peaks. The Wichita Mountains. The Sierra de San Juan.

Rivers.—Name the different forks of the Kansas River. In what lake does the Yellowstone rise? What river embraces the Black Hills between its North and South Fork? Which is the longest tributary of the Missouri? Of the Arkansas? Of the Red? What river rises near Santa Fé? What rivers traverse New Mexico? What rivers rise in the Sierra de San Juan?

Indian Tribes.—In what part of Indian Territory are the Cherokees located? The Creeks? The Seminoles? The Choctaws? What tribe is in the south-western part of the territory? Where is the Cherokee agency? What other tribes besides those laid down on the map are found in Indian Territory? *The Osages, Camanches, Kioways, Pawnees, and Arapahoes*.

Railroads.—What great railroad runs west from Omaha? *The Union Pacific Railroad*. Beside what river does this road run for some distance? What road is it to meet? *The Central Pacific Railroad, from San Francisco*. What places in Kansas are connected by a railroad following the Kansas valley? *Wyandott and Lawrence*.

General Questions.—In what part of Colorado are most of the settlements? In what part of Dakota? Of Nebraska? Of Kansas? Where is Fort Washita? Fort Atkinson? Fort Lyon? Fort Craig? Fort Hall? Fort Randall? Kearney City?

CALIFORNIA, OREGON, NEVADA, WASHINGTON, IDAHO. MONTANA, UTAH, ARIZONA.

LESSON XCIV.

PHYSICAL GEOGRAPHY.

Surface.—We have here that portion of the United States which belongs to the Pacific Slope. It is the most elevated part of the Union, several settlements in Utah being a mile above sea-level, while some of the towns of Nevada are higher than the top of Mt. Mitchell, the loftiest summit in the Atlantic States.

Soil.—Most of this section is dry and barren, its mountains and desert table-lands being but occasionally interspersed with fertile strips bordering the rivers and lakes. The region along the Pacific, however, west of the Sierra Nevada and the Cascade Range, is of an entirely different character, containing some valleys of remarkable fertility.

Mountains.—Besides the Rocky Mountains and their various spurs and outlying ridges, which traverse Idaho and Montana, there are three important ranges farther west,—the Coast Range (parallel to the Pacific, from 25 to 50 miles inland), the Cascade Mountains, and the Sierra Nevada.

The **Cascade Range** is so called from the rapids in the Columbia River, where it makes its way through these mountains in a bed only 150 yards wide. Among its very lofty peaks are Mounts Hood and Jefferson in Oregon (the former, 14,000 feet high), and in Washington Mounts Baker, Ranier, and St. Helen's—the last-named a volcano.

The **Sierra Nevada** (*snowy chain*), which may be regarded as a continuation of the Cascade Range, is about 70 miles in width, the greater part of which is occupied by the western slope. The eastern slope is only five or six miles wide, and terminates in the Great Basin. The rains and snows of the Sierra Nevada are confined almost entirely to its western slope; hence, on its eastern side, it gives rise to no important rivers.

Mount Shasta, a peak of the Sierra Nevada, is among the loftiest mountains in the United States. It is covered with perpetual snow for a considerable distance from its summit, and can be seen in every direction for more than a hundred miles.

The Great Basin.—The Great Basin is a vast sterile triangular tract, from 4,000 to 5,000 feet above sea-level, bounded on the north by the basin of the Columbia River, on the south-east by that of the Colorado, and on the west by the Sierra Nevada. It embraces Nevada and parts of Utah and California.

The Great Basin has a system of lakes and rivers of its own, not communicating with the ocean. Most of its lakes have no visible outlet, and its rivers either empty into these lakes or are lost in the sand. The surface is in some parts covered with wild sage, and in others with a saline or alkaline crust.

Lakes.—The largest lake of this section is Great Salt Lake, 70 miles long by 30 in width. Its waters, like those of Lake Mono in eastern California, are so salt that no fish can live in them, and the human body is supported with great ease on their surface. In hot weather, a thick crust of salt is left on the shore by evaporation. Great Salt Lake resembles the Dead Sea in Palestine; but instead of being de-

pressed 1,300 feet below sea-level, like the latter, it has an elevation of about 4,000 feet.

Pyramid Lake, in the western part of Nevada, is so called from a remarkable pyramidal rock, 600 feet high, which forms an island near its eastern shore; it is elevated nearly a mile above sea-level.

Mammoth Tree Groves.—Gigantic firs are found in various parts of California, Oregon, and Washington; but the Mammoth Tree, or *Sequoia Gigantea*, surpasses them in size, and indeed all other trees in the world. It is found only in California, on the western slope of the Sierra Nevada, between latitude 34° and 41°. Only seven Mammoth Tree groves have as yet been discovered.

Many of these enormous Sequoias, which are supposed to be 2,000 years old and upward, are 30 feet across and 300 feet in height; one or two of them, which have fallen, must even have been a third larger than this. Dancing-parties are held on the stump of one of them which has been cut down, and through the hollow trunk of another, as it lies on the ground, a person can ride seventy-five feet erect on horseback.

Mineral Wealth.—Most of this section, except Utah, is noted for its mineral treasures, particularly the precious metals, which, despite all difficulties, have attracted thousands of immigrants.

LESSON XCV.

Questions on Map of U. S. No. 11.

Latitude.—Between what degrees of latitude is California situated? *Between about 32½° and 42° N. lat.* What states on the Atlantic coast lie in the same latitude? *M., R. I., C., N. Y., N. J., D., M., V., N. C., and S. C.* What sea in the eastern continent lies in the same latitude? *M.* What city in British America is in nearly the same latitude as Olympia? *Q.* What European capital? *Berne.*

Longitude.—Between what degrees of longitude is California situated? *Between about 114½° and 124½° W. lon.* Which has the greater longitude, the most westerly point of California or that of Washington? What lake in British America lies in the same longitude as Great Salt Lake? *Great Slave Lake.*

Mountains.—Name two mountains in the southern part of California. Near what town is Mt. Shasta? What mountain in California is between the coast and the Eel River? Where is Mt. Whitney? Silver Mountain? To what chain do these two mountains belong?

Where are the Wahsatch Mountains? The Blue Mountains? The Three Tetons? The Salmon River Mountains? What mountains traverse Arizona? Central Nevada? Name three lofty peaks in Washington. Name two in Oregon. What mountain is near Utah Lake? What mountains are in the south-eastern part of Nevada? Where is Mt. San Francisco?

Rivers.—How far is the Columbia River navigable? *For large vessels, to the rapids at Dalles, 140 miles; and for steamboats, above the rapids, to Wallula.* How far is the Willamette navigable? *To Portland.* The Sacramento? *To Sacramento City.* The San Joaquin? *To Stockton, 130 miles from San Francisco.* The Colorado? *For steamboats of light draught, about 600 miles.* Name the chief branches of the Columbia. Of the Colorado.

Lakes.—What lakes does the Jordan River connect? Of which of these is it the outlet? Which has the greater elevation, Utah Lake or Great Salt Lake? What other lakes are in Utah? What lake is on the boundary between Nevada and California? Mention four other lakes in Nevada. Mention four in California. What is the largest lake in Montana? In Washington?

Railroads.—What railroad is to meet the Union Pacific Railroad, and thus form a link in the chain of communication between the Atlantic and the Pacific? *The Central Pacific R. R.* What is to be the western terminus of this road? *San Francisco.* What places are connected by the San Francisco and San José R. R.? *S. F. and S. J.* By the California Northern? *Marysville and Oroville.*



SAN FRANCISCO AND SACRAMENTO

Scale of Miles

Washington

SACRAMENTO



GENERAL QUESTIONS

ON THE MAP OF MEXICO AND CENTRAL AMERICA.

LESSON XCVI.

Latitude.—Between what degrees of latitude are Mexico and Central America? *Between about 8° and 32½° N. lat.* What countries on the Atlantic coast of Africa are in about the same latitude? *Senegambia, Sahara, and a part of Morocco.* What countries on the eastern coast of Asia are embraced within these parallels? *Anam, and a part of China Proper.*

Longitude.—Between what degrees of longitude are Mexico and Central America situated? *Between about 83° and 117° W. lon.* What two lakes in the U. States are crossed by the meridian of 83° W. lon.? *Lakes Huron and Erie.* What part of Oregon and Washington is crossed by meridian 117° W. lon.? What city of Illinois is in about the same longitude as Comayagua? *Chicago.*

Central American States.—How many Central American States are there? *Five.* Name them. *Guatemala, San Salvador, Honduras, Nicaragua (nik-ar-ah'gnah), and Costa Rica (kos'tah, re'kah).* Of these, which extends farthest east? Which, farthest west? Which, farthest north? Which, farthest south? Which border on the Pacific? Which, on the Caribbean Sea? Which borders on South America? Which, on Mexico?

Boundaries.—What river forms part of the northern boundary of Mexico? What waters bound Mexico on the east? Bound Guatemala. Bound San Salvador. Bound Honduras. Bound Nicaragua. Bound Costa Rica. What river forms a part of the boundary line between Honduras and Nicaragua?

Capital Cities.—Mention in order the capitals of the five Central American States? Which of these is farthest north? Which, farthest south? Which, farthest west? Which, farthest east? Which is nearest the Pacific coast? Which is situated between two lakes? In what part of Honduras is Comayagua?

Important Places in Mexico.—What is the chief city of the Republic of Mexico? *Mexico.* What city ranks next? *Guadalajara.* What places in Mexico are memorable for battles fought there in the Mexican War? *Buena Vista (bue'nah ves'tah) and Monterey.* Near the mouth of what river is Matamoros? On what gulf is the seaport town of Guaymas (*gwi'nah's*)? What seaport on the Pacific coast just below the Tropic of Cancer? South-east of Mazatlan? *S. B.* What seaport south of Mexico City? For what is Acapulco noted? *For having one of the largest and best harbors in the world.*

LESSON XCVII.

Important Places in Mexico.—Describe the situation of Mexico. Of Matamoros. Of Colima (*ko-le'mah*). Of Guanajuato (*gwah-nah-whah'to*). What places are on the Rio Grande? Which of them is nearest its mouth? In what direction is La Puebla from the capital? La Puebla from Guanajuato? What is the chief seaport on the Gulf of Mexico? *V. C.* What seaport town is on the

Gulf of Mexico? *T.* In what direction is Tampico from San Luis Potosi? San Luis Potosi from Zacatecas (*zahk-ah-ta'kash*)? Zacatecas from Queretaro (*ka-re'tah-ro*)? What seaport is on the west coast of Yucatan? In what direction is Valladolid from Merida? Of the cities of Mexico, which are noted for the silver mines in their vicinity? *San Luis Potosi, Guanajuato, and Zacatecas.* In what zone is Mazatlan? Durango?

Important Places in Central America.—What is the largest city of Central America? *N. G.* What city is a few miles north-west of New Guatemala? *Quetzaltenango (ka-sah'ta-nah'go).* What port of Honduras is on the Bay of Honduras? In what direction is Truxillo (*troo-ke'd'go*) from Omo'a? On what sea is it situated? What place lies at the south-eastern extremity of Nicaragua? At the mouth of what river? *The San Juan (sahn hoo-ahn').*

Of what lake is this river the outlet? What place in Costa Rica a few miles south-east of the capital? What place is about twenty miles north-west of Leon? *Realajo (ra-ah'ta'ho).* What place is on the west shore of Lake Nicaragua? (*See Map of the Nicaragua Route.*) In what direction is Rivas (*re'vash*) from Managua?

Islands.—What islands lie east of Balize? What small islands lie off the north coast of Honduras? What islands in the Pacific lie west of San Blas? What islands lie south-west of Tres Marias (*mah-re'ahs*)? What islands are west of Lower California? Name the principal islands in Lake Nicaragua. *Ometepe (o-ma-ta-pe) and Madera (mah-da'rah).*

Peninsulas and Isthmuses.—Where is the peninsula of Lower California? What waters nearly surround it? What waters nearly surround the peninsula of Yucatan? What isthmus is in the southern part of Mexico? *Tehuantepec (ta-wah-ta-pe'k).* Between what waters is this isthmus? What isthmus connects Central America with South America? What bodies of water does this isthmus separate?

LESSON XCVIII.

Capes and Mountains.—What cape projects from the northern coast of Yucatan? From the north-eastern coast of Nicaragua? What cape is at the southern extremity of Lower California? In what direction from Cape St. Lucas is Cape Corrientes? On what coast is it? What mountain-range traverses Mexico? Mention some of the volcanoes of Mexico. *Popocatepetl (po-po-kah-ta-pe'tl), Colima, and Jorullo (ho-roo'l'yo).*

Gulfs and Bays.—What gulf washes nearly all the eastern shore of Mexico? How long is this gulf from east to west? *About 1,000 miles.* What branch of this gulf is west of Yucatan? Where is Mosquito Gulf? What coast does the Gulf of Nicoya (*ne-ko'yal*) indent? What, the Gulf of Fonseca (*fon-sa'kah*)?

What coast of the peninsula of Lower California is washed by the Gulf of California? What coast of the main-land of Mexico? Of what ocean are the four gulfs last named branches? Of what sea are Mosquito Gulf and the Bay of Honduras branches? How long is the Gulf of California? *About 700 miles.*

Lakes.—In what part of Mexico is Lake Chapala (*chah-pah'tah*)? What river is its outlet? In what part of Mexico is Lake Cuyman (*ki-mah'n*)? What lakes are in the Republic of Nicaragua? With

what gulf and sea are these lakes connected? By what river? Near what lake is the city of Mexico? *Near Lake Titzeuco (tes-ko'o'ko).*

Rivers.—What rivers flow into the Gulf of Mexico between Vera Cruz and the Rio Grande del Norte? What river crosses a part of the Isthmus of Tehuantepec? In what direction does it flow? Into what does it empty? What is the most important river belonging entirely to Mexico? *The Rio de Santiago (re'io da sahn-te-ah'go), the outlet of Lake Chapala.* What river empties into the Pacific at Zacatula? *The Rio de Balsas (bah'll'sahs).*

What river flows into the Gulf of California south-east of Guaymas? What rivers flow into the Rio Grande del Norte? What three rivers flow into the Gulf of California below the Yaqui (*yah-ke'*)? Among what mountains do these rivers rise? What river flows into the head of the Gulf of California? Where does the Tabasco rise?

LESSON XCIX.

General Questions.—Where is Point Palma? Between what two states does the Segovia River run? What state of Mexico lies south of Arizona? Which state of Mexico extends farthest north? What is Balize sometimes called? *British Honduras.* How is the Mosquito Coast situated? What river traverses this coast, north of the San Juan? (*See small Map.*)

Of what division of South America is the Isthmus of Panama a part? *The United States of Colombia.* How wide is this isthmus? *Its width varies from 30 to 70 miles.*

Which of the United States is about the size of Nicaragua? *Louisiana.* Which is about the size of San Salvador? *New Hampshire.* Which is the largest of the Central American States? *Guatemala.* Which is the smallest? *San Salvador.* Which is richest in mineral resources? *Honduras.*

Voyages, Routes, etc.—On what waters would a person sail in going from Acapulco to Guaymas? From Guaymas to San Francisco? From San Francisco to Panama? What isthmus is crossed by the Panama Railroad? (*See Map of Route of the Panama R. F.*) What two seaports are connected by this road? What river does this road follow through part of its course? *The Chagres (chah'grs).*

How is it proposed to connect the Caribbean Sea with the Pacific Ocean, across Nicaragua? *By constructing a ship canal along the River San Juan to Lake Nicaragua, and another from the lake to the Pacific.* (*See Map of the Nicaragua Route.*) What railroad is in progress from Honduras Bay to the Gulf of Fonseca? *The Honduras Inter-oceanic railroad.*

What route has been proposed across the southern part of Mexico? *The Isthmus of Tehuantepec Route.* What is it proposed to construct? 1. *A canal, connecting the Coatzacoalcas River, at the head of navigation, with the Pacific Ocean;* 2. *A railroad from Minatitlan to the Pacific.* What is the width of the Isthmus of Tehuantepec? *About 130 miles.* On what waters would a person sail in going from Vera Cruz to Balize? From Balize to Havana? From Balize to Aspinwall? From Panama to San Francisco?

What is the distance between San Francisco and New York by the Panama Route? *About 6,850 miles.* By the Nicaragua Route? *About 6,220 miles.* By the Isthmus of Tehuantepec Route? *About 5,280 miles.* Around Cape Horn? *About 18,000 miles.*

MEXICO & CENTRAL AMERICA

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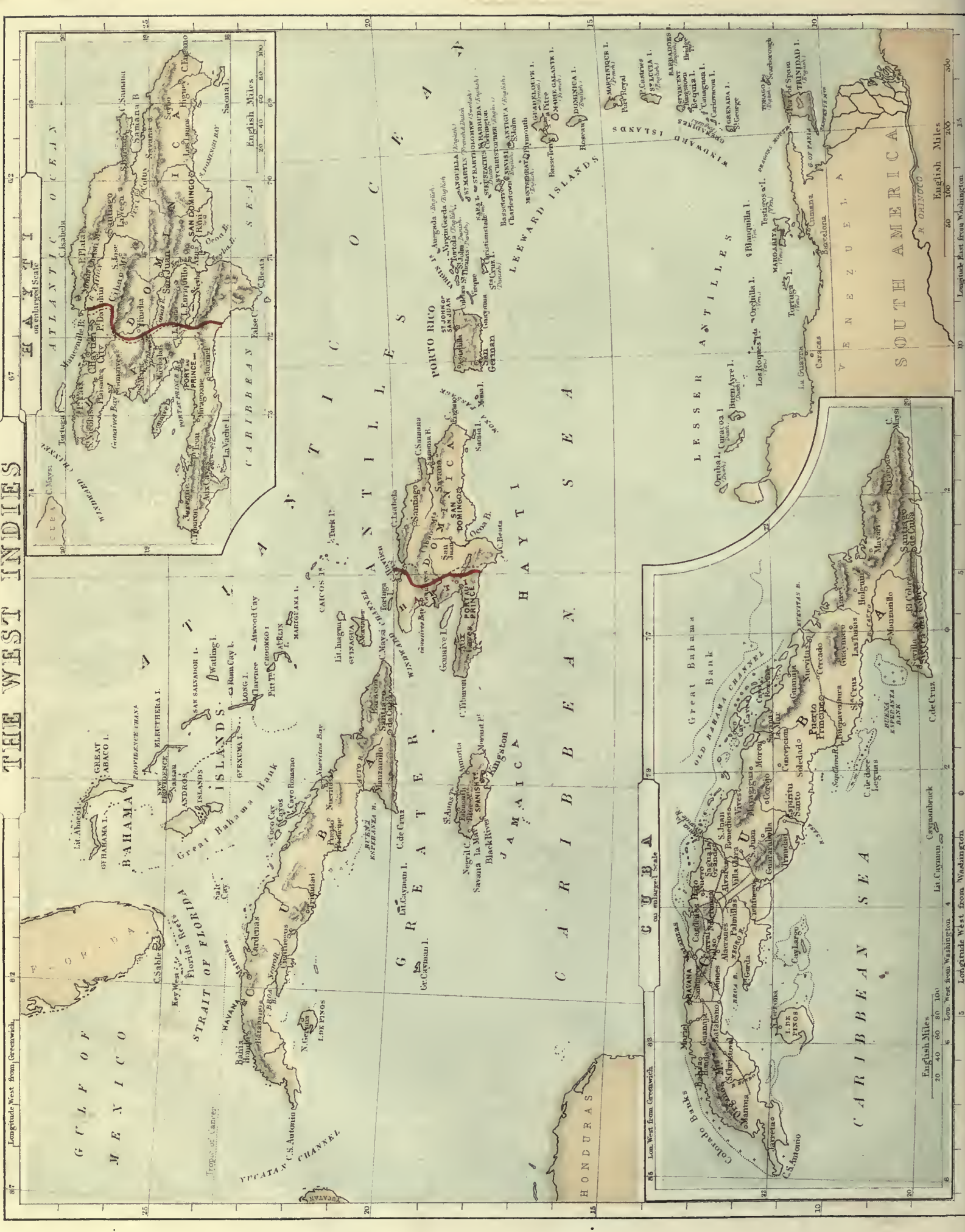
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THE WEST INDIES



STUDIES ON THE MAP OF THE WEST INDIES,

SYSTEMATICALLY ARRANGED.

LESSON C.

Island Groups.—State what waters surround each:—Bahamas, Greater Antilles (*ahn-teel'*), Leeward, Windward, and Lesser Antilles.

Islands.—State in what part of what group each is situated:—Great Bahama, Great Abaco (*ah-bah'ko*), Eleuthera (*el-u'the-rah*), San Salvador, Watling, Long, Crooked, Acklin, Mariгуана (*mah-re-gwah'nah*), Caicos (*ki'kos*), Turk, Great Inagua (*e-nah'gwah*), Great Exuma, Andros, New Providence,—Cuba, Hayti (*ha'te*), Porto Rico (*re'ko*), Jamaica, and Isle de Pinos (*ees'la da pe'noe*), or Isle of Pines.

Virgin Isles, Anguilla (*ang-ghil'la*), St. Martin, St. Bartholomew, Barbuda (*bar-boo'dah*), Saba (*sah'bah*), St. Eustatius, St. Christopher, Nev'is, Antigua (*ahn-te'gah*), Montserrat, Guadeloupe (*gaw-da-loop'*), Marie Galante (*mah-re'gah-lone'*), Dominica (*dom-e-ne'kah*),—Martinique (*mar-tin-ee'k*), St. Lucia (*loo-se'ah*), St. Vincent, Barbadoes, Grenadines (*gren-ah-deens'*), Tobago, and Trinidad.

Blanquilla (*blahn-keel'gah*), Margarita (*mar-gah-re'tah*), Tortuga (*tor-too'gah*), Orchilla (*or-cheel'gah*), Los Roques (*loce ro'kes*), Buen Ayre (*buen i'ra*), Curaçoa (*ku-rah-so'*), and Oruba (*o-roo'bah*).

LESSON CI.

Capital Cities.—State the situation of each:—Nassau,—Havana, Port au Prince (*port o prince*), San Domingo, St. John, and Spanish Town.

Important Places in Cuba.—State the situation of each:—Bahia Honda (*bah-e'ah own'dah*), Matanzas, Cardenas (*kar'-da-nahs*), Nuevitas (*nwa-ve'tahs*), Baraco'a, Santiago de Cuba (*sahn-te-ah'jo da koo'bah*), Manzanillo (*mahn-sah-neel'yo*), Puerto Principe (*pwer'to preen'se-pa*), Trinidad, Cienfuegos (*se-en-fwa'goce*), and Batabano (*bah-tah-bah-no'*).

Important Places in Hayti, Porto Rico, and Jamalen.—State the situation of each:—Cape Haytien (*ha'te-en*), Aux Cayes (*o ka*), Gonaives (*go nine'*),—Santiago, Savana (*sah-vah'-nah*), San Juan,—Aguadilla (*ah-gwah-deel'gah*), Guayama (*gwi-ah'mah*), San German,—Falmouth, St. Ann's Town, Annetta, Kingston, Black River, and Savanna la Mar.

Capes.—Describe each:—Maysi (*mi'se*), Cruz (*crooz*),

St. Antonio,—Isabela, Samana, Engaño (*en-gahn'yo*), Beata (*ba-ah'tah*), Tiburon (*te-boo-rown'*),—Morant Point, Negril'.
Mountains.—Describe each:—Cibao (*se-bah'o*) and Blue.
Bays.—Describe each:—Nuevitas, Buena Esperanza (*bwa'nah es-pa-rah-nah'zah*), Broa,—Samana, Ocoa, and Gonaives.

Channels and Passages.—Describe each:—Providence, Mona (*mo'nah*), Windward, and Yucatan.

QUESTIONS ON THE MAP OF THE WEST INDIES,

PROMISCUOUSLY ARRANGED.

LESSON CII.

I. Into how many groups are the West Indies divided? Into five groups. Name them. Of these, which extends farthest north? Farthest south? Farthest east? Farthest west? Between what channel and ocean do the Bahamas lie? Which of these groups taken together are called the Caribbean Isles? *The Leeward and Windward Islands.* Between what sea and ocean do the Caribbean Isles lie?

II. In what direction from South America are the Lesser Antilles? What sea is south of the Greater Antilles? In what direction are the Bahamas from Cuba? What islands compose the Bahamas? Of these, which is the most important? *New Providence.* What waters would you cross in going from New Providence to Florida? From New Providence to Jamaica?

III. In what direction is Cuba from Florida? Of what group is Cuba a part? Mention the other islands of this group. In what direction from Porto Rico are the Virgin Isles? To what group do these belong? *The Leeward Islands.* How far south do the Leeward Islands extend? To the 16th degree of N. latitude. Mention the other islands of this group. Which of the Windward Islands is nearest to the coast of South America? *T.*

IV. What islands compose the Lesser Antilles? Of these, which is nearest Trinidad? In what direction from the Lesser are the Greater Antilles? From what country does Yucatan Channel separate Cuba? *Yucatan.* Between what islands is Windward Channel? What cape is on the west side of this channel? What seaports are on the south-east coast of Cuba?

V. What passage separates Hayti from Porto Rico? What gulf is between Trinidad and South America? *Paria (pah're-ah).* What bays indent the coast of Hayti? In what direction is Hayti from Cuba? Cuba from Jamaica? Porto Rico from Hayti? Hayti from Jamaica? Gadeloupe from Barbadoes? Barbadoes from Trinidad? On what island is the Port of Spain?

VI. What island is south of the western part of Cuba? To what island does it belong? *To Cuba.* What bay is between it and Cuba, on the north-east? What city is the capital of Cuba? In what part of Cuba is Havana? How is the island of Hayti, or San Domingo, politically divided? Into two parts; viz., *Hayti and Dominica.* Which is the larger? Which occupies the western part of the island? What city is the capital of Hayti? Of Dominica?

VII. What city is the capital of Jamaica? What seaports are on the north coast of this island? What noted seaport is on the south coast of Jamaica? *K.* What mountains are in Cuba? *The Cordilleras de Cuba.* In Jamaica? What capes are on the coast of Hayti? Of Porto Rico? Of Cuba? Of Jamaica?

LESSON CIII.

I. What seaport is on the north coast of Hayti? About how far north of Port au Prince is Cape Haytien. 90 miles. What noted seaport in Cuba is about fifty miles east of Havana? What port is on the Bay of Nuevitas? What bays indent the southern coast of Cuba? What cape projects into Yucatan Channel? What waters does this channel connect?

II. To what group does the Island of San Salvador belong? What other names has it? *Guanahani (gwah-nah-hah'ne)* and *Cat Island.* For what is it noted? *For having been the first land in the New World discovered by Columbus, Oct. 12, 1492.* What island is north-west of San Salvador? South-east? To what group does Antigua belong? In what direction is it from Barbuda? Barbuda from the Virgin Isles?

III. Name three of the Virgin Isles that belong to Denmark. *St. J., St. T., and St. C.* Which of these is the southernmost? What is the principal place on Santa Cruz? Which of the Leeward Islands belongs to Sweden? To whom does Martinique belong? For what is this island remarkable? *For containing six extinct volcanoes; much of the surface is covered with volcanic rocks.* To whom do the Barbadoes belong? Which group contains several islands belonging to Venezuela?

IV. (*See Map of Cuba.*) What seaport on the southern coast is connected with Havana by railroad? What one on the northern coast? What place is at the mouth of the Sagua la Grande (*sah'gwah lah grahn'da*)? With what place in the interior is Cienfuegos connected by railroad? In what direction is Batabano from Cardenas? What river empties into Broa Bay?

V. Between what degrees of longitude is Cuba? Between about 74° and 85° W. lon. What state on the coast of the United States is in the same longitude as the western extremity of Cuba? *The western part of northern Florida.* What state of Central America? *The eastern part of Honduras.* What city in the United States is in about the same longitude as the eastern extremity of Cuba? *New York.* What city in South America? *Bogota.*

VI. Which of the United States is about the size of Cuba? *Louisiana.* About the size of Hayti? *South Carolina.* About the size of Jamaica? *Connecticut.* What city is the greatest commercial port of the West Indies? *Havana.* About how far is it from New Orleans? 650 miles. What city of the West Indies ranks next to Havana in commercial importance? *Kingston.*

VII. (*See Map of Hayti.*) What two lakes are in the island of Hayti? Which of these is the larger? Which belongs to Dominica? How is San Domingo Bay situated? Describe the Yuma River. By whom was Hayti discovered? *By Columbus, in 1493.* Where was the first Spanish colony planted? *At Isabela, on the northern coast.* When was San Domingo founded? *In 1496.*

MEXICO, BALIZE, AND CENTRAL AMERICA.

LESSON CIV.

THE REPUBLIC OF MEXICO.



THE FLAG OF MEXICO.

Geographical Position, etc.—Mexico lies chiefly between the Gulf of Mexico and the Pacific Ocean. Its greatest length is about 2,000 miles, and its breadth about 1,000. It is divided into several states and territories.

Physical Features.—The surface is greatly diversified by mountain ranges and lofty peaks, some of which are volcanoes. The interior is an elevated table-land, sloping to the coasts, which are generally low.

Soil, etc.—The soil in most parts is very fertile. The climate is hot and sickly on the coasts, but more healthy and agreeable in the interior. On the table-lands of the Sierra Madre, the climate is cold; on the slopes of the mountains, it is temperate.

The productions, like the climate, vary at different elevations. Indian corn and the banana are the staple products. The *mag'uey*, a variety of the agave, or American aloe, furnishes a beverage called *pulque* (*pull'ka*), of which the inhabitants are very fond. The cochineal insect, valuable for the red dye which it affords, abounds on a species of the cactus plant. Minerals are abundant, particularly gold and silver. Horned cattle are numerous, and supply hides, etc., in great quantities.

Inhabitants, etc.—Nearly one-half of the inhabitants are Indians; the remainder are divided between the Creoles, or people descended from European parents (almost wholly Spanish), and the Mestizoes, or mixed races. Tillage and mining form the chief pursuits; in the greater part of Mexico, manufacturing industry is scarcely known. The religion is that of the Roman Catholic Church.

Traveling Facilities.—Most of the roads are poor. The only two good carriage-roads lead from the capital to Vera Cruz. Mules are generally used for the transport of both passengers and merchandise.

Manufactures and Exports.—The chief articles manufactured are brandy, sugar, olive-oil, paper, glass-ware, gunpowder, and soap. Bees'-wax is extensively collected in some parts. Of the exports, metals, cochineal, hides, cattle, dyewoods, and medicinal herbs, are the most important.

Cities, etc.—MEXICO, the capital, is situated in a vast plain of carefully cultivated fields, inclosed by lofty mountains, about two miles from Lake Tezcuco. The city is in the form of a square, and is inclosed by high walls. It is noted for its numerous churches, convents, and squares.

GUADALAJARA, situated near the Rio Grande de Santiago, is, next to the capital, the largest and most interesting city. The natives of this place manufacture jars of scented earth, which are in much request. LA PUEBLA, a large city, lying about eighty miles south-east of Mexico, is noted for its numerous churches, and its manufactures of soap, glass, iron, and steel. The chief seaports of Mexico are TAMPICO, VERA CRUZ, ACAPULCO, MAZATLAN, and GUAYMAS.

YUCATAN.—This peninsula, a state of the Mexican Confederation, lies between the Bay of Campeche and the Caribbean Sea.

Physical Features.—It is mostly level, and deficient in regular supplies of water. In summer, the land is generally inundated to such an extent as to interfere with agricultural operations.

Soil, etc.—The soil is poor, except in the south; the climate is hot and unhealthy. The chief products are logwood and mahogany. Maize, cot-

ton, rice, tobacco, cocoa-nuts, and sugar-cane, are sources of wealth to the inhabitants. Cattle are numerous.

Inhabitants, etc.—The inhabitants are chiefly whites, though there are numerous Indians. Agriculture forms the leading pursuit. There are no manufactures of any note. Dyewoods, mahogany, salted meat, and hides, form the leading exports.

Cities, etc.—MERIDA, the capital, is situated about thirty miles from the northern coast. It is connected with its port, SISAL, by a good road; its trade is inconsiderable. CAMPECHE, about ninety miles south-west of Merida, is the principal seaport of Yucatan.

BALIZE, OR BRITISH HONDURAS.

Geographical Position.—Balize, or Belize, is situated south of the peninsula of Yucatan, and west of the Bay of Honduras.

Surface, etc.—The coast is low and swampy, but the interior is hilly. The soil is poor, and the climate, during the wet season, between the months of June and September, is unhealthy. Forests are abundant, and supply large quantities of mahogany and other timber. Wild animals, birds, and turtles, are numerous.

Inhabitants, etc.—The inhabitants are chiefly Indians and negroes. The country is a colonial possession of Great Britain.

Manufactures and Exports.—No articles of any note are manufactured. The chief exports are mahogany and other hard cabinet woods, cochineal, tortoise-shell, sarsaparilla, and cocoa-nuts.

BALIZE, the capital of the colony, is situated on a river of the same name.

CENTRAL AMERICA.

Geographical Position, etc.—Central America lies between Mexico and the Isthmus of Panama. It includes the Republic of Guatemala, the State of Honduras, and the Republics of Nicaragua, Costa Rica, and San Salvador.

Physical Features.—Lofty table-lands extend along the western coast, from which the country descends in terraces. In the east are extensive plains. There are numerous volcanoes along the Pacific coast.

Soil, etc.—The soil is generally rich. The climate varies according to the elevation; on the coast plains, it is hot. Indigo, cotton, sugar, cocoa, mahogany, and logwood, are among the most important products. Indian corn, rice, beans, and plantains, are raised in abundance in some parts, and form the staple food of the inhabitants. Cattle are numerous, particularly in Nicaragua and Honduras. Birds of brilliant plumage are plentiful, and minerals are abundant.

Inhabitants, etc.—About one-fourth of the inhabitants are whites, one-half Indians, and the rest mixed races. Agriculture forms the leading pursuit, but it is rudely conducted. The religion is Roman Catholic.

Manufactures and Exports.—Little attention is paid to manufactures. The chief exports are indigo, tobacco, coffee, Brazil-wood, cochineal, and hides.

Cities.—NEW GUATEMALA, the capital of the Republic of Guatemala, is situated on a high plain about forty-five miles from the Pacific coast. The houses are built only one story high, from fear of earthquakes.

COMAYAGUA, the capital of Honduras, is situated 180 miles east of the city of New Guatemala. MANAGUA, the capital of Nicaragua, is situated on the south bank of Lake Managua, about fifty miles south-east of Leon.

SAN SALVADOR is the capital of the Republic of San Salvador. This city was almost entirely destroyed by an earthquake in 1854; and, for a time, the government was removed to Cojutepeque (*ko-hoo-ta-pa'ka*). SAN JOSÉ, situated in the interior, is the capital of Costa Rica.

THE MOSQUITO TERRITORY extends along the coast of Central America, from Cape Honduras to the River San Juan. It is inhabited by a race of Indians, who have always succeeded in maintaining their independence of Spanish power. They regard their country as an independent state, under the protection of the British Government.

THE WEST INDIA ISLANDS.

LESSON CV.

Geographical Position.—The West Indies comprise a number of islands, extending between North and South America, and separating the Gulf of Mexico and the Caribbean Sea from the Atlantic.

How Divided.—Except Hayti, which is independent, St. Bartholomew, which is a Swedish colony, and several islands that are owned by Venezuela, all the West Indies belong to Great Britain, Spain, France, Holland, and Denmark. They are divided into the Bahama Isles, the Greater Antilles, the Leeward Islands, the Windward Islands, and the Lesser Antilles. The Leeward and Windward Islands are often classed together as the Caribbee Isles.

THE BAHAMA ISLES.

Geographical Position, etc.—This group lies south-east of Florida. They number about 500; but many of them are uninhabitable coral rocks. The surface of the islands is generally low and level.

Soil, etc.—The soil is light and sandy; the climate, pleasant. The chief article cultivated is cotton. Cattle and sheep are raised. Guinea and Indian corn, vegetables, and tropical fruits, grow on some of the islands.

Inhabitants, etc.—The inhabitants are chiefly creoles and negroes. The exports are cotton, dye-woods, mahogany, turtles, fruits, and coffee. Nassau, on the island of New Providence, is the capital.

THE GREATER ANTILLES.

Geographical Position, etc.—The Greater Antilles lie between the Caribbean Sea and the Atlantic Ocean, and comprise the four large islands, Cuba, Hayti or San Domingo, Porto Rico, and Jamaica.

THE ISLAND OF CUBA.

Geographical Position.—Cuba, the largest of the West India Islands, lies south of Florida, at the entrance to the Gulf of Mexico. A mountain range extends midway of the island, nearly its whole length.

Soil, etc.—The soil is fertile, and the climate warm, but generally healthy. Tobacco, cotton, sugar, coffee, and various kinds of fruits, are produced in abundance. Mahogany, cedar, ebony, etc., are found in the mountain districts.

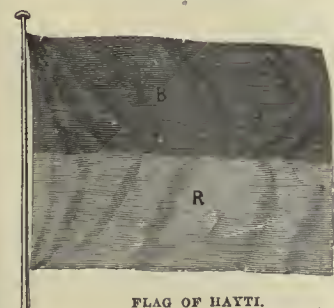
Inhabitants, etc.—The inhabitants are chiefly creole whites, blacks and mulattoes (both slaves and free), Spaniards, and other foreigners. The island belongs to Spain, and is under the government of a Captain-General, appointed by the crown. The whites are Roman Catholics.

Traveling Facilities.—Several railroads have been constructed.

Manufactures and Exports.—The manufactures are coarse woolens, straw hats, cigars, etc. The chief articles exported are sugar, coffee, molasses, spirits, tobacco, cigars, wax, honey, copper ore, hard wood, etc.

Cities.—HAVANA, the capital and chief commercial city, is situated on a fine harbor in the northern part of the island. MATANZAS, an important seaport, is situated on the northern coast, about fifty miles east of Havana.

THE ISLAND OF HAYTI, OR SAN DOMINGO.



FLAG OF HAYTI.

Geographical Position, etc.—This large island lies between Cuba and Porto Rico. The center is traversed by mountain ranges.

Soil, etc.—The soil is fertile; the climate is hot, and unhealthy to foreigners. Among the leading products are coffee, tobacco, cotton, cocoa, sugar, bees'-wax, cochineal, and ginger. Mahogany, satinwood, logwood, etc., form important articles of export.

Inhabitants, etc.—Hayti formerly belonged to France and Spain; the former holding the western part of the island, and the latter the eastern. It is now divided into two independent states, governed by free blacks. The western part is called the Republic of Hayti, the eastern Dominica. PORT AU PRINCE, on the Bay of Gonaives, is the capital of the former, and the principal seat of foreign trade. SAN DOMINGO, on the southern coast, is the capital of the Dominican Republic.

THE ISLAND OF PORTO RICO.

Geographical Position, etc.—Porto Rico lies east of Hayti, from which it is separated by Mona Passage. It is beautifully diversified with woods, hills, and valleys, and well watered by small streams from the mountains. The soil is rich and fertile; the climate is unusually fine.

Sugar, coffee, maize, and rice, are the staple products. ST. JOHN, the capital and chief seaport, is situated on a small island off the northern coast.

THE ISLAND OF JAMAICA.

Geographical Position, etc.—Jamaica lies in the Caribbean Sea, south of Cuba. It is well watered, and has many excellent harbors. The Blue Mountains traverse the island from east to west. In the valleys the soil is fertile, and the climate hot. Sugar, molasses, rum, indigo, coffee, arrow-root, and tropical fruits, are the chief products.

Inhabitants, etc.

—By far the greater part of the inhabitants are blacks.

The chief articles manufactured are sugar and rum, which, with molasses, coffee, cotton, and fruits, form the leading exports.

SPANISH TOWN, on the west bank of the Cobre (*ko'bra*), is the capital. KINGSTON, the chief commercial city, is connected with the capital by a railroad. Steamers plying between Aspinwall and New York often stop at Kingston for a supply of coal.



A STEAMER RECEIVING COAL AT KINGSTON.

THE CARIBBEE ISLES.

Geographical Position, etc.—The Caribbee Isles extend from Porto Rico to South America. Those north of the 15th parallel of N. lat. are called the Leeward Islands; and those south of that line, the Windward Islands. Hurricanes of great violence are of frequent occurrence in the neighborhood of these islands.

The Virgin Isles, a small group lying east of Porto Rico, belong to Great Britain; as, also, do Barbuda, Antigua, Dominica, St. Lucia, St. Vincent, Barbadoes, Grenada, Tobago, and Trinidad.

Dominica is of volcanic origin. Barbadoes, the oldest colony of Great Britain, exports sugar, molasses, tamarinds, arrow-root, aloes, and ginger. Trinidad, the largest of the Caribbee Isles, lies near the South American coast. It exports cocoa, coffee, cotton, sugar, molasses, and hides.

Guadeloupe and Martinique belong to France. The former is divided into two parts, by a river communicating at each end with the sea. Its chief productions are sugar, coffee, cocoa, cloves, olive-oil, rum, ginger, logwood, and tobacco.

THE LESSER ANTILLES.

The Lesser Antilles lie west of Trinidad, along the northern coast of South America. Margarita, Tortuga, Orchilla, and Los Roques, belong to Venezuela; Buen Ayre, Curaçoa, and Oruba, to Holland.

SOUTH AMERICA

50 Longitude West from Greenwich 40

Scale of Miles
100 200 300 400 500 600



27 Longitude West 17 from Washington 13

17 Longitude East 27 from Washington 37

47 57

STUDIES ON THE MAP OF SOUTH AMERICA,

SYSTEMATICALLY ARRANGED.

LESSON CVI.

Countries.—Bound each:—United States of Colombia, Venezuela (*ven- ez-we'lah*), British Guiana (*ghe-ah'nah*), Dutch Guiana, French Guiana, Brazil, Uruguay (*oo-roo-gwi'*), Argentine (*ar'jen-teen*) Confederation, Patagonia, Chili, Bolivia, Peru, Ecuador (*ek-wah-dore'*), and Paraguay (*pah-rah-gwi'*).

Capital Cities.—State the situation of each:—Bogota (*bo-go-tah'*), Caracas (*kah-rah'kaks*), Georgetown, Paramar'ibo, Cayenne (*ki-en'*), Rio Janeiro (*ri'o ja-ne'ro*), Montevideo, Buenos Ayres (*bo'nos a'riz*), Santiago, Sucre (*soo'kra*), Lima (*le'mah*), Quito (*ke'to*), and Asuncion (*ah-soon'se-own*).

Important Places in the U. S. of Colombia and Venezuela.—State the situation of each:—Chagres, Aspinwall, Panama (*pan-a-mah'*), Cartagena, Santa Martha (*sahn'tah mar'tah*), Mompox (*mom-poh'*), Socorro, Pasto (*pahs'to*), Popayan (*po-pah-yahn'*), Buenaventura (*bwa-nah-ven-too'rah*),—Maracaybo (*mah-rah-ki'bo*), Merida, Truxillo, Valencia (*vah-len'she-ah*), Porto Cabello, La Guayra (*lah gwi'rah*), Cumana (*koo-muh-nah'*), Barcelo'na, and Angostura (*ahn-gos-too'rah*).

LESSON CVII.

Important Places in Brazil.—State the situation of each:—Obidos (*o-be'-dode*), Santarem (*sahn-tah-ren'*), Macapa (*mah-kah-pah'*), Para (*pah-rah'*), Maranhã, Caxias (*kah-she'ahs*), Parnahiba (*par-nah-e'bah*), Natal (*nah-tahl*), Oeiras (*o-a'e-rahs*), Pernambuco (*per-nahm-boo'ko*), Bahia (*bah-c'ah*), Porto Seguro (*sa-goo'ro*), Diamantina (*de-ah-mahn-te'nah*), Ouro Preto (*oo'ro pra'to*), Sao Paulo (*soon' pū'lo*),* Desterro, Porto Alegre (*ah-la'gra*), Cuyaba (*koo-yah'bah*), Matto Grosso (*mah'to gros'so*), and Villa Boa (*veel'-lah bo'ah*).

In Uruguay and the Argentine Confederation.—Maldonado (*mahl-do-nah'do*), Colonia (*ko-lo'ne-ah*),—Salta (*sahl'tah*), Tucuman (*too-koo-mahn'*), Corrientes, Santa Fé (*sahn'tah fə*), Parana (*pah-rah-nah'*), Mendoza, Catamarca (*kah-tah-mar'kah*), and Cordova.

In Chili and Bolivia.—Caldera (*kahl-da'rah*), Copiapo', Coquimbo (*ko-keem'bo*), Quillota (*keel-yo'tah*), Valparaiso (*vahl-pah-ris'o*), Talcahuana (*tahl-kah-wah'-nah*), Concepcion (*kon-sep-se-own'*), Valdivia, San Carlos (*sahn kar'loce*),—Tnpiza (*too-pe'sah*), Cobija (*ko-be'hah*), Potosi (*po-to'se*), Cochabamba (*ko-chah-bahm'bah*), and La Paz (*lah pahz*).

LESSON CVIII.

Important Places in Peru, Ecuador, and Paraguay.—State the situation of each:—Huamanga (*wah-mahng'gah*), Cuzco (*koo's'ko*), Puno (*po'-no*), Arequipa (*ah-ra-ke'pah*), Callao (*kahl-lah'o*), Pasco (*pahs'-ko*), Truxillo, Caxamarca (*kah-hah-mar'kah*),—Loja (*lo'hah*), Cuenca (*kuen'kah*), Guayaquil (*gwi-ah-keel'*), Riobamba (*re-o-bahm'bah*),—and Villa Rica (*veel'yah re'kah*).

Islands.—Describe each:—Margarita, Trinidad, Joannes (*zho-ahn'nes*), South Georgia, Falkland (*fawk'land*) Islands, Terra del Fuego (*fwa'go*), Hermit, Desolation, Adelaide, Wellington, Chiloe (*cheel-o-a'*), Ju'an Fernandez, St. Felix, and Galapagos (*gal-a-pa'gus*).

Peninsulas and Isthmuses.—Describe each:—St. Joseph, Tres Montes, and Isthmus of Panama.

Capes.—Describe each:—Gallinas (*gahl-ye'nahs*), North, St. Roque (*roke*), Frio (*fre'o*), St. Antonio, Blanco, Horn, Tres Montes, and Blanco.

Mountain Ranges, etc.—Describe each:—Parime (*pah-re'ma*), Acaray (*ah-kah-ri'*), Brazilian Andes, Vulcan, Andes, Geral (*zha-rah'l'*), Cordillera

Grande (*kor-dil-la'rah grahn'da*).—Mt. Aconcagua (*ah-kon-kah'gweh*), Mt. Illimani (*eel-ye-mah'ne*), Mt. Sorato (*so-rah'to*), Mt. Chuquibamba (*choo-ke-bahm'bah*), Mt. Chimborazo (*chim-bo-rah'zo*), Mt. Pichincha (*pe-chin'chah*), and Mt. Cotopaxi (*ko-to-pax'e*).

LESSON CIX.

Gulfs and Bays.—Describe each:—Daricn, Venezuela, All Saints, San Matias (*sahn mah-te'ahs*), St. George, Peñas (*pen'yahs*), Guayaquil, Chococo, and Panama.

Strait.—Describe it:—Magel'lan.

Lakes.—Describe each:—Maracaybo, Patos (*pah'toce*), Porongos (*poron'goce*), Mirim (*me-reen'*), Aullagas (*owl-yah'gahs*), and Titicaca (*te-te-kah'kah*)*.

Rivers.—Describe each:—Atrato (*ah-trah'to*), Magdale'na, Canca (*kow'-kah*), Orino'co, Ventuari (*ven-too-ah're*), Caroni (*kah-ro-ne'*), Cassiquiare (*kahs-se-ke-ah'ra*), Guaviare (*gwah-ve-ah'ra*), Meta (*ma'tah*), Essequibo (*esse-ke'bo*), Surinam (*soo-rin-am'*).

Amazon, Putumayo (*poo-too-mi'o*), Japura (*hah-poo'rah*), Negro, Branco, Tunguragua (*toon-goo-rah'gwah*), Huallaga (*wahl-yah'gah*), Ucayale (*ooki-ah'la*), Javary (*hah-vah're*), Purus (*poo'roos*), Madeira, Beni (*ba-ne'*), Mamore (*mah-mo-ra'*), Guapore (*gwah-po'ra*), Tapajos (*tah-pah'zhoce*), Xingu (*shing-goo'*), Tocantins (*to-kahn-teens'*), and Araguay (*ahr-ah-gwi'*).

Parnahiba, San Francisco, Parahiba (*pah-rah-e'bah*), Rio de la Plata (*re'o da lah plah'tah*), Uruguay, Parana, Paranaliba (*pah-rah-nah-e'bah*), Grande (*grahn'da*), Paraguay, Pilcomayo (*pil-ko-mi'o*), Vermejo (*ver-ma'ho*), Salado (*sah-lah'do*), Colorado, Negro, and Dulce (*dool'sa*).

QUESTIONS ON THE MAP OF SOUTH AMERICA,

PROMISCUOUSLY ARRANGED.

LESSON CX.

I. How is South America bounded? How far north does S. America extend? $12\frac{1}{2}$ degrees north of the equator. Do any of the other grand divisions extend as far south as S. America? What city on Lake Erie is in about the same longitude as Quito? *Buffalo*. What countries of S. America lie wholly north of the equator? Which lie partly north and partly south of the equator?

II. What is the most southerly country of S. America? The most easterly? The most northerly? The most westerly? What is the most noted eastern cape of S. America? *St. R.* Southern? Western? Northern? From what island does Cape Horn project? *Hermit Island*. What rivers form most of the boundary of Paraguay? In what direction is Buenos Ayres from Santiago? Lima from Bogota?

III. What city in the Argentine Confederation is opposite Santa Fé? On what river are these cities situated? In what country is Cochabamba? Mendoza? Angostura? Popayan? Cuzco? On what river is Angostura? Asuncion? Obidos? Corrientes? Of what river is the Cauca a branch? What river connects the Orinoco with the Rio Negro? *C.* In what country is the source of the Amazon?

IV. What mountain ranges are in Brazil? What rivers form the Rio de la Plata? *P. and U.* What rivers form the Madeira? What is the south arm of the Amazon called? *The Para River*. What island is at the mouth of the Amazon? In what direction are the Falkland Islands from Patagonia? Terra del Fuego from the Falkland Isles? What lake is partly in Bolivia and partly in Peru?

V. Of the countries of S. America, which border on the Caribbean Sea? Which, on the Atlantic Ocean? On the Pacific Ocean? Through what countries do the Andes extend? What is the largest country of S. America? The smallest? *F. G.* The longest mountain range? The longest river? The largest city? *Rio Janeiro*. What seaports are on the coast of the United States of Colombia? Of Venezuela? Of Chili? Of Peru? Of Brazil?

* The outlet of Lake Titicaca is the Desaguadero (*des-ah-gwah-da'ro*) River, which connects it with Lake Anllagas.

* Sound *dw* as in *now*.



ANIMALS AND PLANTS OF SOUTH AMERICA.

- | | | |
|-------------------------|-----------------------|-------------------------|
| 1. Brazilian porcupine. | 9. Peccaria. | 16. Brazilian eagle. |
| 2. Great ant-bear. | 10. Little ant-eater. | 17. Boa-constrictor. |
| 3. Liama. | 11. American monkeys. | 18. Ocelot. |
| 4. Alligator. | 12. Jaguar. | 19. Armadillo. |
| 5. Tapir. | 13. Toucans. | 20. Sea-leopard. |
| 6. Chinchilla. | 14. Macaws. | 21. Hawk's-bill turtle. |
| 7. Capybara. | 8. Puma. | 22. Penguins. |

- | | | |
|--------------------------|------------------|-------------------------|
| a. Wild convolvulus. | e. Pampas grass. | i. Great fan palma. |
| b. Victoria regia. | f. Sugar-cane. | j. Varieties of cactus. |
| c. Branch of cocoa-tree. | g. Chili pines. | k. Bamboo. |
| d. Orchid (acinetum). | h. Sago palm. | l. Chilean jubaea. |

LESSON CXI. SOUTH AMERICA.

Geographical Position, etc.—South America, a vast peninsula, occupies the southern half of the Western Continent. Its length from north to south is about 4,000 miles, and its greatest breadth is about 3,000.

Physical Features.—Three great mountain systems diversify the surface: viz., the Andes, which stretch along the western coast; the Parime Mountains, which extend along the southern border of Venezuela; and the Brazilian Andes, consisting of two ranges running parallel to the coast of Brazil, with several diverging chains.

Between the Andes and the mountain systems of Venezuela and Brazil, extends a vast plain. This plain may be divided into three parts,—the Region of the Llanos, or savannahs (level grassy tracts), which occupy most of the basin of the Orinoco; the Region of the Selvas, or forest plains, in the lower part of the basin of the Amazon; and the Region of the Pampas, or prairies, of the Argentine Confederation.

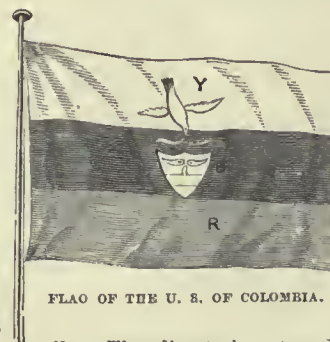
Inhabitants, History, etc.—Most of the inhabitants are descendants of the native Indians, either half-civilized or still in a savage state. The ruling people are the descendants of Europeans, mostly Spaniards and Portuguese. Nearly the whole of South America, for about three centuries before the present, was under the control of European Governments.

Spain had a great part of the northern and almost all the western coast, besides large tracts in the interior; Portugal held the present empire of

Brazil. The different colonies established their independence in the course of the first quarter of the present century.

The political divisions of South America are the United States of Colombia, Venezuela, British, Dutch, and French Guiana, Brazil, Uruguay, the Argentine Confederation, Patagonia, Chili, Bolivia, Peru, Ecuador, and Paraguay.

THE UNITED STATES OF COLOMBIA.



FLAG OF THE U. S. OF COLOMBIA.

Geographical Position.—This country occupies the north-western part of South America, between the Pacific Ocean and Venezuela. It extends westward to Costa Rica in Central America, including the Isthmus of Panama.

Physical Features.—Several chains of the Andes overspread a large portion of the country. East of these are extensive plains.

Soil, etc.—The soil is exceedingly fertile. The climate is not and unhealthy, except on the elevated tableland. In the uplands, wheat and other grains are produced; in the river basins and along the coasts, coffee, cotton, cocoa, indigo, sugar, and tobacco, with various medicinal herbs and tropical fruits. The Llanos afford pasturage for immense herds of cattle and horses, and the forests are rich

in dye and cabinet woods. Gold, silver, platina, and rock salt, are abundant. About fifty miles north of Bogota are emerald-mines, which supply a great part of the world with this precious stone.

Natural Curiosities.—Near the city of Bogota is the celebrated Cataract of Tequendama (*ta-ken-dah'mah*), in the river Bogota—a branch of the Magdalena. Its height is about 570 feet, and the width of the stream 36 feet. The Natural Bridges of Icononzo (*e-ko-non'zo*) are also much celebrated.

Inhabitants, etc.—The population is composed of whites, Indians, negroes, and mixed races. Agriculture is in a rude state. The farmers are occupied chiefly in raising live-stock. The Roman Catholic church prevails.

Traveling Facilities.—In the mountainous districts there are no roads, and travelers are carried in a kind of basket-chair on the backs of porters. In other parts, mules form the chief means of conveyance. Steamboats now ply on the Magdalena, and a railroad spans the Isthmus of Panama.

Manufactures and Exports.—Manufactures are of the simplest kinds. Commerce receives attention. The chief exports are hides, specie, and bullion.

Cities.—BOGOTA, the capital, is situated in a fertile plain on the Bogota, nearly 9,000 feet above the level of the sea. The houses are built low, from fear of earthquakes, and constructed of sun-dried bricks, whitewashed, and covered with tiles. Churches and convents cover nearly half the city.

CARTIAGENA is the chief seaport and naval arsenal of the republic. It is connected with the Magdalena by a canal. POPAYAN lies in a fertile plain near the Cauca River. The inhabitants are chiefly mulattoes and negroes.

THE REPUBLIC OF VENEZUELA.

Geographical Position.—Venezuela lies between the U. S. of Colombia on the west and Guiana on the east, and extends from Brazil to the Caribbean Sea.

Physical Features.—The greater part of the surface is a vast plain. There are some mountain ridges in the south and west.

Soil, etc.—The soil is very productive. The climate is warm. The year is divided into two seasons, the wet and the dry. All the tropical products grow here luxuriantly. Animals and insects are numerous, and pearl oysters are found along the coast.

Inhabitants, etc.—The population may be divided into three classes,—whites, Indians, and mixed races. The whites are engaged chiefly in agriculture and commerce. The religion is that of the Roman Catholic church.

Traveling Facilities.—There are no good roads or bridges. Traveling and inland commerce are carried on by means of mules and llamas.

Manufactures and Exports.—Manufactures are few and simple; the exports consist of tropical plants, together with cattle and the articles they yield.

Cities, etc.—CARACAS, the capital, lies in a valley, about 12 miles from its port, La Guayra. MARACAYBO, on Lake Maracaybo, carries on an active trade with the interior. LA GUAYRA and CUMANÁ are seaports on the Caribbean Sea. ANOSTURA is the chief place of trade in the valley of the Orinoco.

LESSON CXII.

THE COLONIES OF GUIANA.

Geographical Position, etc.—Guiana lies east of Venezuela, along the Atlantic, between the mouth of the Orinoco and that of the Oyapok. It consists of three colonies, belonging to France, Holland, and Great Britain,—called respectively, French, Dutch, and British Guiana.

Physical Features.—Along the coast, the land is low and flat. It is level for some distance inland, but in the south is hilly and mountainous.

Soil, etc.—The soil is very rich, and vegetation is luxuriant. The climate is hot. On the coast there are two winters, or rainy seasons, and two dry seasons, during the year. Valuable woods, spices, and tropical plants, abound. Insects are numerous.

Inhabitants, etc.—The interior is inhabited chiefly by Indians; the coasts, by European settlers, negroes, and mixed races. The leading pursuit of the

settlers is the cultivation of sugar and coffee. In French Guiana, the people are Roman Catholics; in British and Dutch Guiana, Protestants.

Traveling Facilities.—The chief mode of traveling is by boats on the various rivers. In some sections, canals are in course of construction.

Manufactures and Exports.—Manufactures are few and unimportant. The exports are coffee, sugar, rum, molasses, indigo, fruits, and spices.

Cities, etc.—GEORGETOWN, the capital of British Guiana, lies on the east bank of the Demerara (*dem-er-ah'ra*), one mile above its mouth. The streets are traversed by canals. PARAMARIBO, the capital of Dutch Guiana, is located on the west bank of the Surinam, about six miles above its mouth. CAYENNE, the capital of French Guiana, is situated on the island of Cayenne, near the coast. It is noted for its trade in Cayenne pepper.

THE EMPIRE OF BRAZIL.



FLAG OF BRAZIL.

Geographical Position, etc.—This vast empire comprehends the eastern, and much of the central, part of S. America. It has a coast line 3,700 miles in length.

Physical Features.—The northern part of Brazil consists chiefly of a vast plain, traversed by the Amazon and its tributaries. The shores of the eastern coast are low, but gradually rise to the mountainous region, which runs parallel to the coast from 20 to 150 miles inland. The water-

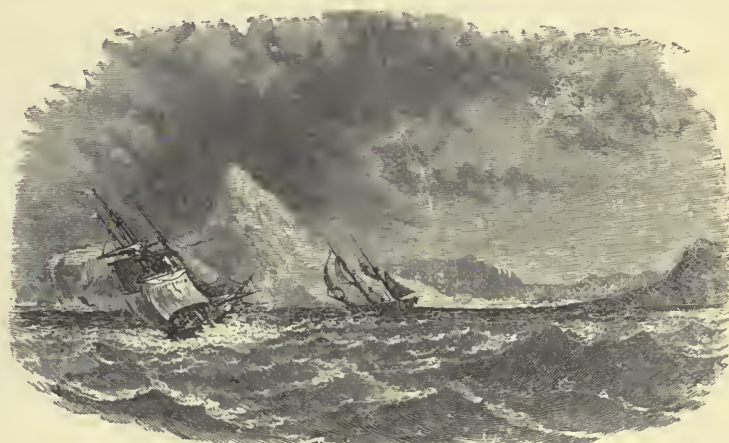
courses are lined with almost impenetrable forests.

Soil, Climate, etc.—The soil is fertile, and vegetation exceedingly luxuriant. The climate is mild and agreeable, except in the north. As in all other regions south of the equator, the order of the seasons is the reverse of ours; December, January, and February, are their hottest months.

The banana forms the principal food of the Indians, and the flour of the cassava-root is much used by the poorer classes. Other tropical productions are abundant. The forests swarm with wild animals, and birds of the richest plumage; the plains afford pasturage for thousands of wild cattle. The diamond-mines of Brazil are exceedingly valuable.

Inhabitants, etc.—The inhabitants consist of whites (chiefly of Portuguese descent), negroes, mixed races, and savage tribes of Indians. Among the whites, the Roman Catholic church prevails.

Traveling Facilities.—All goods are transported on the backs of mules or horses; scarcely any part of the empire is passable for carriages.



ENTRANCE TO THE BAY OF RIO JANEIRO.

Manufactures and Exports.—Manufactures are yet in their infancy. The exports are sugar, coffee, cotton, hides, horns, tallow, jerked beef, cabinet and dye woods, drugs, gold, and diamonds.

Cities.—RIO JANEIRO, on the west side of the Bay of Rio, is the capital

and principal seat of the foreign commerce of the empire. The houses are generally built of granite. Fountains, fed by a magnificent aqueduct, are numerous. The environs of the city are exceedingly picturesque. PARA exports considerable quantities of cocoa, caoutchouc (*koo'chook*) or India rubber, isinglass, rice, and drugs.

PERNAMBUCO is an important commercial city. BAHIA, a large and flourishing seaport, lies on the east side of the Bay of All Saints.

THE REPUBLIC OF URUGUAY.

Geographical Position.—Uruguay lies north-east of the Rio de la Plata, and extends from the Uruguay River to the Atlantic.

Physical Features, etc.—Along the coast, it is level and almost destitute of trees; in the center, mountainous; and in the rest of the territory, undulating. The soil is good; the climate, though damp, is healthy. Cattle and horses form the wealth of the inhabitants. Traveling facilities are few and inferior.

Inhabitants, etc.—Most of the inhabitants are Indians,—some civilized, and others in a savage state. The whites are mostly Roman Catholics.

Manufactures and Exports.—Manufactures are unimportant. The exports are hides, beef, butter, hair, and feathers.

Cities, etc.—MONTE-VIDEO, the capital, has a good port on the left side of the La Plata, and is the chief city of the republic. MALDONADO, on the same estuary, 60 miles east of the capital, is a well-fortified seaport town.

LESSON CXIII.

THE ARGENTINE CONFEDERATION.



FLAG OF THE ARGENTINE CONF.

fruits and plants of both temperate and tropical climes are produced; but cattle, horses, and mules, are the chief dependence.

Inhabitants, etc.—The population consists mainly of Spaniards, creoles, native Indians, and negroes. The shepherds of the pampas lead a wandering life, capturing wild cattle by means of a lasso, which they use with great dexterity. The religion is Roman Catholic.

Traveling Facilities.—The roads are better than in most parts of South America. The rivers afford great facilities for transportation.

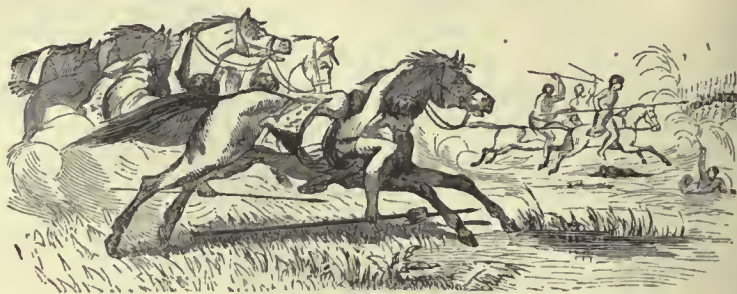
Manufactures and Exports.—Manufactures are few, consisting chiefly of coarse woolen stuffs, leather, and turned wares. Hides, horns, horse-hair, wool, ostrich-feathers, and salted meats, are the chief exports.

Cities.—BUENOS AYRES, the capital, on the south-west side of the Rio de la Plata, about 150 miles from its mouth, carries on an extensive trade with the United States and Great Britain. MENDOZA, situated on a high plain at the foot of the Andes, is the chief seat of the trade between Chili and the Argentine Confederation. PARANA, on the Parana River, is an important city.

PATAGONIA.

Geographical Position, etc.—Patagonia embraces the southern extremity of South America, south of Chili and La Plata. The western part (which is claimed by Chili) is traversed by the Andes; the eastern consists of a succession of terraces.

Soil, etc.—Little is known respecting the soil in the interior. Along the eastern coast, it is sterile; on and near the Rio Negro, it is adapted to wheat and other grains. The climate is cold. Water-fowl and seals frequent the rocky shores.



INDIANS OF PATAGONIA.

Inhabitants.—The country is thinly inhabited by Indian tribes, who are as barbarous as the country is desolate. They lead a wandering life, their habitations consisting of a framework of stakes covered with the skins of animals.

THE REPUBLIC OF CHILI.

Geographical Position.—Chili extends from the Desert of Atacama on the north to Patagonia on the south, and from the Andes to the Pacific.

Physical Features.—The land is low on the coast, level in the central parts, and broken and elevated as it approaches the Andes. Chili has an extensive coast, which affords several good harbors.

Soil, etc.—The soil of the midland vales is rich; in other parts, it is sandy and dry. The climate is temperate and healthy. In some parts of northern Chili, years pass without rain, but dews are frequent and heavy. Earthquakes often occur, and volcanoes are numerous. Indian corn, wheat, and other grains, are extensively cultivated. Minerals are abundant, particularly silver and copper.

Inhabitants, etc.—The inhabitants are chiefly Spaniards, mestizoes, and Indians. Agriculture and mining form the leading pursuits. The Roman Catholic church prevails.

Traveling Facilities.—These are, as yet, few and imperfect. A railroad is in progress from Valparaiso to the capital, a distance of 70 miles. The tracks through the ravines are passable only by mules.



FLAG OF CHILI.

Manufactures and Exports.—The chief manufactures are earthenware jars, hempen cloths, cordage, soap, tallow, leather, and brandy. The leading exports are metals, hides, wheat, jerked beef, wool, and hemp.

Cities, etc.—SANTIAGO, the capital, lies at the foot of the Andes, on the river Mapocho (*mi-po'chah*). The houses are built low, from fear of earthquakes.

VALPARAISO, on the Pacific coast, is the chief seaport of Chili, and one of the most flourishing seats of trade on the western coast of S. America. COQUIMBO, on the Coquimbo River, about a mile from the Pacific, is noted for its trade in minerals and chinchilla-skins.

THE REPUBLIC OF BOLIVIA.

Geographical Position.—Bolivia lies north of the Argentine Confederation, between Peru and Brazil. Part of its western frontier borders on the Pacific.

Physical Features.—The western part is traversed by ridges of the Andes; in the east are extensive plains. The coast district is a sterile desert. The great plateau containing Lakes Titicaca and Anllagas, is over 12,000 feet above the level of the Pacific.

Soil, Climate, etc.—The soil is for the most part fertile; the climate varies

according to the elevation and distance from the equator. In the high-lands, Indian corn, wheat, and other grains, are cultivated; in the lower districts, various tropical fruits and plants. Cinchona-trees, from which Peruvian bark is obtained, are numerous.

Inhabitants, etc.—Nearly three-fourths are either Indians or mixed races. Some of the native tribes are intelligent and industrious, while others are still in a savage state. Agriculture and mining form the chief pursuits. The white inhabitants are Roman Catholics.

Traveling Facilities.—Roads are few and poor. Wheeled vehicles are not used. Goods are transported on the backs of mules and horses.

Manufactures and Exports.—Manufactures are few. Cotton goods, cloths of llama and alpaca hair, glass-ware, leather, silver, and hats of vienna wool, are made to a limited extent. The leading articles of export are precious metals, wool, hats, and Peruvian bark.

Cities.—SUCRE, the capital, lies in a fine valley upon the table-land of the interior, about 9,500 feet above the level of the sea. It has a large and handsome cathedral. COCHABAMBA is situated in a rich and well-cultivated district, on the south side of a spur of the Andes. LA PAZ, on a small tributary of the Beni, is the chief city, and carries on an extensive trade.

LESSON CXIV.

THE REPUBLIC OF PERU.

Geographical Position.—Peru lies south of Ecuador and west of Brazil and Bolivia.

Physical Features.—It embraces three distinct regions: the mountainous, or central district; the narrow plain between the Andes and the ocean; and the great plains, which extend eastward from the Andes to the interior of Brazil. Volcanoes are numerous.

Soil, etc.—The soil is fertile in some parts; the climate varies according to the elevation. On the coast it is uniformly hot, and no rain ever falls, though dense mists are of frequent occurrence.

Grains and rice flourish in the temperate districts; the warmer valleys yield abundant crops of tropical fruits. The mountain region abounds in minerals. The coca-plant, which is used instead of tobacco, is much cultivated both in Peru and Bolivia. Guano, which is extensively used as a manure, has been largely exported from the little group of the Chincha Islands, lying off the coast, about 150 miles from Lima.

Inhabitants, etc.—The inhabitants are like those of the other South American states. The whites do not equal one-seventh of the entire population; they are mainly Roman Catholics. The Indians of Peru are the descendants of races that had attained considerable civilization before the discovery of the New World. Agriculture is the chief employment; mining receives some attention. Internal trade suffers much from the want of good roads.

Manufactures and Exports.—Coarse cotton and woollen cloths, leather cloaks, and jewelry, are manufactured to some extent. The exports consist of gold and silver, chinchilla-skins, Peruvian bark, cotton, copper ore, hides, guano, sugar, and the wool of the vicuna, alpaca, and sheep.

Cities.—LIMA, the capital and largest city, is situated on the small river Rimac (*re-mak'*), about six miles from its port Callao, on the Pacific. Like most Spanish cities, Lima has a large square in the center, where all the streets terminate. Cuzco, on a tributary of the Ucayale, is the chief city in the mountain region, and the second in the country in population. AREQUIPA is one of the best-built cities in South America.

THE REPUBLIC OF ECUADOR.

Geographical Position.—Ecuador lies between the U. S. of Colombia and Peru, and extends from Brazil to the Pacific Ocean.

Physical Features.—The western part is traversed by the Andes, and the eastern forms part of the great central plain of South America.

Soil, etc.—The soil is fertile. The climate on the coast is hot, while in the table-lands it is that of perpetual spring, though this country lies in the center of the torrid zone. The productions are similar to those of the United States of Colombia. Turtles abound in the Amazon.

Inhabitants, etc.—Indians and mestizoes form the bulk of the population. The white inhabitants are Roman Catholics. Agriculture and mining are the chief employments.

Traveling Facilities.—The roads are poor. Inland commerce is carried on by means of mules. The torrents and chasms are spanned by rope bridges.

Manufactures and Exports.—Manufactures are confined chiefly to the weaving of cotton cloth, and the making of quilts, carpets, and pottery.

Cities.—QUITO, the capital, lies nearly under the equator, on a slope of the volcano of Pichincha, at an elevation of 9,000 feet above the sea.



A SOUTH AMERICAN FOREST.

Owing to the inequalities of the ground on which this city is constructed, its streets are uneven; and so numerous are the crevices of the mountain that many of the houses are built on arches.

GUAYAQUIL, the chief seaport, lies on the west bank of the Guayaquil River. The harbor is good, and large ships can ascend to the town.

THE REPUBLIC OF PARAGUAY.

Geographical Position.—Paraguay, an inland peninsula of South America, lies south of Brazil, between the rivers Parana and Paraguay.

Physical Features.—It is generally level. A mountain chain traverses the center of the country, forming a water-shed for several small streams.

Soil, etc.—The soil, particularly in those tracts that are inundated during the rainy season, is very fertile; the climate is moist and temperate. Grain, rice, cotton, tobacco, sugar, and *yerba maté*, or Paraguay tea, are among the chief products. Various drugs, such as sarsaparilla, rhubarb, jalap, nux vomica, and Peruvian bark, are abundant.

Inhabitants, etc.—Most of the inhabitants are Indians, partially civilized; the whites, however, are the ruling people. The latter are mostly Roman Catholics. Agriculture and the raising of cattle form the leading pursuits.

Traveling Facilities.—The Paraguay River affords the chief means of transportation and travel.

Manufactures and Exports.—There are no manufactures of note; among the chief exports are hides, tallow, horns, horses, and Paraguay tea.

Cities, etc.—ASUNCION, or ASSUMPTION, the capital, lies on the left bank of the Paraguay, and carries on considerable trade, chiefly in tea, hides, and timber. VILLA RICA ranks next to the capital in importance.

STUDIES ON THE MAP OF EUROPE,

SYSTEMATICALLY ARRANGED.

LESSON CXV.

Countries.—Bound each:—Norway, Sweden, Russia, Turkey, Greece, Austria, Italy, France, Spain, Portugal, Belgium, Holland, Prussia, Denmark, Germany, Switzerland,—Scotland, England, Wales, and Ireland.

Capital Cities.—State the situation of each:—Christiania (*kris-te-ah'ne-ah*), Stockholm, St. Petersburg, Constantinople, Athens, Vienna, Florence, Rome, Paris, Madrid, Lisbon, Brussels, Hague, Berlin, Copenhagen, Berne,—Edinburgh (*ed-in-bur-ruh*), London, and Dublin.

Important Places in Norway, Sweden, and Russia.—State the situation of each:—Hammerfest (*hakm'ner-fest*), Drontheim (*dron'time*), Bergen,—Tornea (*tor'ne-o*), Pitea (*pit'e-o*), Upsal, Nordkoping (*nord'cho-ping*),* Carlserona (*karls-kroo'nah*), Gottenburg, and Fahlun (*fah'loon*).

Archangel (*ark-ayn-jel*), Perm, O'renburg, Saratov (*sa-brah-tov*), Astrachan', Kaffa (*kahf'fah*), Sebastopol (*se-as-to-pol*), Alexandrov (*ah-lez-ahn-drov*), Odessa, Kiev (*ke-ev*), Warsaw, Piga (*re'gah*), Cronstadt, Abo (*ah'bo*), Moscow, Tula (*too'tah*), and Nov'gorod.

LESSON CXVI.

Important Places.—State the situation of each:—Belgrade', Bucharest', Adrianople, Salonica (*sah-lo-ne'kah*), Scutari (*skoo'tah-re*), Sophia (*so-fe'ah*),—Corinth, Navarino (*nah-vah-re'no*), and Patras (*pah-trahs*).

Prague, Lemberg, Cronstadt, Trieste (*tre-est*). Buda, Pesth (*pest*), Debreczin (*da-bret'sin*),—Turin, Milan, Venice, Bologna (*bo-lone'yah*), Taranto (*tah'rahm-to*), Naples, Leghorn, Gen'oa,—Palemo, Messina (*mes-se'nah*), and Syracuse.

Havre (*hahv'r*), Rou'en, Stras'burg, Lyons, Marseilles (*mar-saylz*), Toulouse (*too-looz'*), Bordeaux (*bor-do*), Nantes (*nants*), Brest, Tours (*toor*), Or'leans,—Santan'der, Barcelo'na, Valencia, Granada (*grah-nah'dah*), Mal'aga, Sev'ille,—Setubal (*sa-too'bahl*), Oporto, and Coimbra (*ko-rem'brah*). Antwerp,—Amsterdam, Groningen (*gron'ing-en*),—Stettin, Dantzic, Konigsberg (*ko'niyz-berg*),* Bres'lan, Magdeburg, Frankfurt, and Cologne (*ko-lone'*).

Aalborg (*ol'borg*), Flens'burg, Sleswick,—Brem'en, Hamburg, Leipsic (*lipo'sik*), Dresden, Nuremberg, Munich,—Basle (*bahl*), Zurich (*zoo'rik*), and Geneva.

* The sound of *ö* is nearly like that of *u* in *fur*.

LESSON CXVII.

Islands.—Describe each:—Jan Mayen (*yahn mi'en*), Cyprus, Rhodes, Candia, Ionian Isles, Malta (*maul'tah*), Sicily, Sardinia, Corsica, Elba, Balearic (*bal-e-ar'ic*) Isles, British Isles, Hebrides (*heb'rid-eez*), Orkney Islands, Shetland Islands, Fa'roe Islands, Iceland, Zealand, and Fu'ien.

Capes.—Describe each:—North, Sviatoi (*sve-ah'toi*), Matapan (*mah-tah-pahn'*), Spartavento, St. Vincent, Finisterre (*fin-is-tayr'*), Ortegal (*or-ta gahl'*), and the Naze.

Mountain Ranges, etc.—Describe each:—Dovre Field (*do-vre fe-eld'*), Kiolen (*kyo'len*), U'ral, Caucasus, Balkan (*bahl-kahn'*), Ap'ennines, Cevennes (*sa-ven'*), Pyrenees, Asturian (*as-too're-an*), Sierra Morena (*me-ra'nah*), Sierra Nevada, Alps, and Carpathian.—Valdai (*vahl'di*) Hills, Mt. Elburz (*el-boorz'*), Mt. Vesuvius,—Mt. Etna, and Mt. Hecla.

Seas.—Describe each:—White, Caspian, Az'of, Black, Mar'mora, Grecian Archipelago (*ar-ke-pel'a-go*), Mediterranean, Adriatic (*ad-ri-a-tik*), North, Baltic, and Irish.

LESSON CXVIII.

Gulfs and Bays.—Describe each:—One'ga, Dwina, Mezen (*mez-ayn'*), Telleskaia (*ches-ki'ah*), Salonica, Taranto, Naples, Genoa, Lyons, Biscay, Zuider Zee (*zi'der ze*), Dantzig, Riga, Finland, and Bothnia.

Straits.—Describe each:—Enikale (*en-e-kal'la*), Bosporus, Dardanelles (*dar-dah-nelz'*), Otranto (*o-trahn'to*), Messina, Bonifacio (*bo-ne-fah'cho*), Gibraltar, Dover, Skag'er Rack, and Cattegat.

Channels.—Describe each:—English and St. George's.

Lakes.—Describe each:—Wener (*wa'ner*),* Wetter,† Peipus (*pa'e poee*),‡ Lado'ga,§ Saina (*zi'mah*),|| Onega,¶ and Constance.**

Rivers.—Describe each:—Onoga, Dwina, Vithegda (*ve-cheg'dah*), Soukhona (*soo-ko'nah*), Meze-ne, Petch'ora, Ural,—Volga, Kama (*kah'mah*), O'ka, Mok'sha, Oo'pa, Mosk'va,—Don, Donetz', Dnieper (*ne'per*), Des'na, Bug (*boog*), and Dniester (*nees'ter*).

* The outlet of Lake Wener is the Göta River, which flows south and empties into the Strait of Cattagat.

† The outlet of Lake Wetter is the Motala (*mo-tah'tah*) River. Lake Wetter is connected with Lake Wener by the Göta Canal.

‡ The outlet of Lake Peipus is the Narova (*nah'ro-rah*) River.

§ The outlet of Lake Ladoga is the Ne'va River.

|| The outlet of Lake Saina is the Woxen River.

¶ The outlet of Lake Onega is the River Swir (*seer*).

** The outlet of Lake Constance is the River Rhine.

Danube, Theiss (*tice*), Pruth, Drave, Save, Po, Ti'ber, Rhone, Saone (*so-ne*), E'bro, Guadalquivir (*gaw-dal-kwin'er*), Guadiana (*gaw-de-an'a*), Tagus, Douro (*doo'ro*), Garonne (*gah-ron'*), Loire (*lwahr*), and Seine (*sane*).

Rhine, Main, We'ser, Elbe, O'der, Vis'tula, Bug, Niemen (*ne'men*), Du'na, Tornea, Dahl, Glommen, Woxen, Swir (*seer*).

QUESTIONS ON THE MAP OF EUROPE,

PROMISCUOUSLY ARRANGED.

LESSON CXIX.

I. How is Europe bounded? Of the countries of Europe, which extends farthest north? Which, farthest south? *S.* What mountains, river, straits, and seas, form a natural boundary line between Europe and Asia? What strait and sea, between Europe and Africa? What is the characteristic feature of the coast of Europe? *It is indented by numerous seas and bays.*

II. What branch of the Arctic indents the northern shore of Russia? What branch of the Atlantic indents the western shore of France? What waters separate the British Isles from Continental Europe? What sea is between England and Denmark? Between Sweden and Russia? Between Austria and Italy?

III. What gulfs are tributary to the Baltic Sea? By what strait is the Mediterranean connected with the Atlantic? What seas are between Turkey in Europe and Asia Minor? What sea is north of the Black Sea? On what waters would you sail in going from Copenhagen to Paris? From Paris to Trieste? From Trieste to Constantinople?

IV. What mountain range is in the north-eastern part of Austria? In the central part of Turkey? In Italy? What range in Switzerland? In France? In Spain? In Norway? What country of Europe has no seacoast? What countries form part of north-western Russia? *L. and F.*

V. Into what seas do all the rivers of southern Russia empty? What city is the capital of both Sweden and Norway? What city is the nominal capital of Norway? Sailing from Christiania to St. Petersburg, through what bodies of water would you pass? What city is the chief seaport of northern Russia? *A.* Of southern Russia? *O.* Of western Russia? *C.* Of south-eastern Russia? *A.*

VI. What three countries of Europe does the Arctic Circle cross? Which of the United States are in about the same latitude as Spain? What country of N. America extends about as far north as Norway? *Russian America.* What capital is on the Danube? Through what countries does the Danube flow?

VII. Of the countries of Europe, which is the largest? Which is the smallest? *Greece.* What is the largest island of Europe? *Great Britain, on which are Scotland, England, and Wales.* What is the longest river? *V.* The largest sea? *M.* The largest bay? *B.* The most populous city? *London.*

STUDIES ON THE MAP OF THE BRITISH ISLES,

SYSTEMATICALLY ARRANGED.

LESSON CXX.

Countries.—Bound each:—Scotland, England, Wales, and Ireland.

Capital Cities.—State the situation:—Edinburgh, London, Dublin.

Important Places in Scotland.—State the situation of each:—Thurso, Inverness', Aberdeen', Montrose, Dundee, Perth, Dunfermline (*dum-fer'-lin*), Leith, Haddington, Kelso, Hawick (*haw'-wik*), Greta Green, Dumfries, Kilmarnock, Paisley (*paze'le*), Glasgow, Dumbar'ton, Greenock, Falkirk (*fuwl'kirk*), and Stirling.

In England.—State the situation of each:—Berwick, Newcastle, York, Hull, Norwich (*nor'rij*), Yarmouth, Ipswich, Colchester (*kole'-ches-ter*), Greenwich (*grin'ij*), Chatham, Canterbury, Dover, Brighton, Portsmouth, Southampton, Exeter, Plymouth.

Bath, Bristol, Cheltenham, Hereford (*her'e-furd*), Shrewsbury, Chester, Birkenhead, Liverpool, Preston, Lancaster, Carlisle, Leeds, Bradford, Bolton, Manchester, Sheffield, Nottingham, Leicester (*les'ter*), Wolverhampton, Birmingham, Cambridge, Oxford,—Newport, and Douglas.

LESSON CXXI.

Important Places in Wales.—State the situation of each:—Bangor, Merthyr Tydfil, Swansea (*swon'se*), Pembroke, and Carmarthen.

In Ireland.—State the situation of each:—Londonderry, Coleraine', Belfast, Armagh (*ar-mah'*), Dundalk (*dun-dawk'*), Drogheda (*dröh'he-dä*), Kingstown, Wicklow, Wexford, Waterford, Queenstown, Cork, Bantry, Killarney, Limerick, Galway (*gawl'way*), Westport, Sligo, Donegal, Carrick, Athlone', Kilkenny, Cash'el, Tipperary, and Clonmel'.

Islands.—Describe each:—Orkney, Hoy, Mainland (*see Small Map*),—Wight,—Channel (*see Small Map*), Alderney (*awl'der-ne*), Guernsey, Sark, Jersey,—Lundy, Hol'yhead, Anglesea (*ang'g'l-se*), Man, Arran.

Hebrides, Islay (*i'la*), Jura, Col'onsay, Iona, Mull, Staffa, Tiree (*tir-e'*), Rum, Skye,—Barra, South Uist (*wist*), North Uist, Lewis,—Rathlin, Valentia, Arran, and Achil (*ak'il*).

LESSON CXXII.

Capes.—Describe each:—Wrath, Dunnet Head,* Duncansby Head, Kinnaird's Head, Flamborough Head, Spurn Head, St. Alban's Head, Start Point, Lizard Point, Land's End, Hartland Point,—Mal'in Head, Clear, Miz'en Head, Slyne Head, Erris Head, and Telin Head.

Mountains.—Describe each:—Grampian Hills, Chev'iot Hills,—Slievebloom.—Ben Ne'vis, Ben Lo'mond, Snowdon, and Cad'er-Id'ris.

Firths† and Bays.—Describe each:—Pentland, Dornoch, Moray, Tay, Forth, the Wash, Mount's, Barnstaple, Carmarthen, St. Bride's, Cardigan, Morecambe, Solway, Luce, Clyde, Lorn,—Dundrum, Dundalk, Long Island, Bantry, Kenmare', Dingle, Tralce', Galway, Clew, Sligo, and Donegal.

Straits and Sounds.—Describe each:—Dover, Menai (*men'i*), Jura, Sleat, the Little Minch, and the Minch.

* Capes are sometimes called *Heads* and *Points*. † Firths are called *Firths* in Scotland.

LESSON CXXIII.

Channels.—Describe each:—English, Bristol, St. George's, and North.

Lakes.—Describe each:—Loch Ness, * Lomond, Windermere,—Lough Neagh (*na*), † Erne, Allen, Gara (*gah'rä*), Mask, Corrib, Derg, and Killarney.

Rivers.—Describe each:—Spey (*spa*), Dee, Tay, Tweed, Tyne, Wear, Tees, Humber, Ouse (*ooz*), Swale, Ure, Aire, Trent, Nen, Ouse, Wensum, Orwell, Stour, Thames (*temz*), Avon, Severn, Wye, Dee, Mersey, Ribble,—Boyne, Liffey, Slan'ey, Barrow, Nore, Suir (*shure*), Blackwater, Lee, and Shannon.

QUESTIONS ON THE MAP OF THE BRITISH ISLES,

PROMISCUOUSLY ARRANGED.

LESSON CXXIV.

I. What seaport of France is in nearly the same longitude as London? *Harre*. Which is farther east, London or Edinburgh? What places are in the vicinity of London? On which side of the Thames is Lambeth? Greenwich? In what direction is Waltham Abbey from London?

II. Which extends farther west, Ireland or Portugal? What place in Scotland is farthest north? Farthest east? What place is on the outlet of Loch Ness? What canal connects Loch Ness with the western coast? What islands are off Land's End? *The Scilly (sil'le) Isles*.

III. On what waters would a person sail in going from London to Hull? From Hull to Edinburgh? From Glasgow to Dublin? From Dublin to Liverpool? What is the longest river of Scotland? *The Forth*, 170 miles. To what place is it navigable? *S*. The longest river of England? *The Thames*, 215 miles. To what place is it navigable for large vessels? *L*. To what place is the Shannon navigable? *To Limerick*. What is its length? 225 miles.

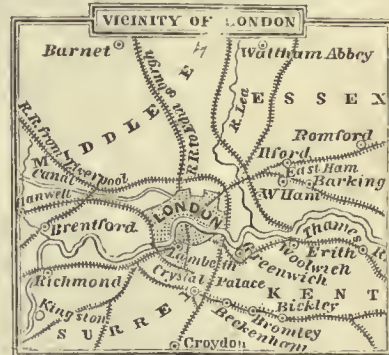
IV. How are the Shetland Islands situated? *North-east of the Orkney Islands*. Name some of the principal of the Shetland Islands. (*See Small Map*.) How many inhabitants do the Hebrides contain? *About 100,000*. For what is Valentia Bay noted? *For being the eastern terminus of the Atlantic Telegraph*. What bay is the western terminus?

V. Which is the largest lake in Scotland? *L*. In England? *W*. In Ireland? *N*. What is the loftiest mountain in Great Britain? *Ben N*. In Wales? *Mt. S*. What place is at the mouth of the Mersey, opposite Liverpool? On what river is Manchester? Of what river is the Irwell a branch?

VI. Mention some places in the vicinity of Manchester. What ports are opposite the Isle of Wight? What is the northernmost point of Ireland called? What, the southernmost? What five bays are between Cape Clear and the mouth of the Shannon? Mention some places on the eastern coast of Ireland. On the southern coast. On the western coast.

* Lakes are called *Lochs* (*loks*) in Scotland, and *Loughs* (*loks*) in Ireland.

† The outlet of Lough Neagh is the Bann River, which empties into the North Channel.





ANIMALS AND PLANTS OF EUROPE.

- | | | |
|---------------------|-----------------|-------------------|
| 1. Hare. | 10. Goose. | 19. Red deer. |
| 2. Fox. | 11. Pig. | 20. Ibex. |
| 3. Hedgehog. | 12. Sheep. | 21. Chamois. |
| 4. Rabbit. | 13. Goat. | 22. Shrimp. |
| 5. English terrier. | 14. Bull. | 23. Lobster. |
| 6. Mastiff. | 15. Ass. | 24. Craw-fish. |
| 7. Shetland pony. | 16. Wolf. | 25. Muscles. |
| 8. Horse. | 17. Boar. | 26. Crab. |
| 9. Swan. | 18. Brown bear. | 27. Prawn. |
| a. Grape-vine. | d. Chestnut. | g. Corsican pine. |
| b. Poplar. | e. Willow. | h. Cypress. |
| c. Ash. | f. Scotch fir. | i. Oak. |

LESSON CXXV. EUROPE.

Geographical Position, etc.—Europe, one of the grand divisions of the Eastern Hemisphere, lies west of Asia and north of Africa. Its greatest length is 2,400 miles, and its extreme breadth 2,300.

Physical Features.—The mountain chains of Europe may be divided into four systems: the Scandinavian, which traverses Norway and Sweden; the Alps, of which most of the mountains of France, Germany, Austria, Turkey, and Italy, are branches; the Pyrenees, between France and Spain, to which several parallel chains that traverse Spain belong; and the Carpathian, which stretches through the north-eastern part of Austria. A vast plain extends from western France through Belgium, Holland, northern Germany, Prussia, and Russia, to the foot of the Ural Mountains. The surface of Europe is everywhere well watered.

Inhabitants.—About nine-tenths of the population belong to the Caucasian race. They are divided into three principal families: the Teutonic or German, inhabiting the northern and central parts of the continent,—the Slavonic, found in the eastern portion,—and the Celtic, in some small parts in the west. The south of Europe is occupied by a race in which these three great families are blended. The rest of the population belong to the Mongolian race; these are the Finns and Laplanders,—the Samoides and Kalmucks, in Russia,—the Turks,—and the Magyars, of Hungary.

The chief political divisions of Europe are Norway, Sweden, Russia,

Turkey, Greece, Austria, Italy, France, Spain, Portugal, Belgium, Holland, Prussia, Denmark, Germany, Switzerland, and the United Kingdom of Great Britain and Ireland.

THE KINGDOM OF NORWAY.

Geographical Position.—Norway, the most northerly country of Europe, occupies the western portion of the Scandinavian Peninsula.

Physical Features.—The surface is mountainous, abounding in romantic scenery; the coast is deeply indented by numerous *fjords*, or salt-water inlets.

Soil, etc.—The soil is generally poor; in some places it is so shallow as not to admit of being plowed. The winters are long and cold, and the summers warm, but of short duration. Vegetation is extremely rapid, on the return of summer. Rye, barley, oats, and potatoes, are the chief agricultural products. Fruit-trees are not common. The rivers, seas, and lakes, abound with fish. Iron and copper are the most abundant minerals.

Inhabitants, etc.—The Norwegians are of Germano Celtic origin. Their chief pursuits are raising cattle, mining, and fishing. Lutheranism prevails.

Traveling Facilities.—There are no railroads, canals, or public coaches, in the kingdom. Stations have been established about ten miles apart, at which the neighboring farmers are obliged to furnish travelers with horses and drivers for a sum fixed by government. Few of the rivers are navigable.

Manufactures and Exports.—Manufactures are few, and limited chiefly to useful articles for domestic and agricultural purposes. The exports are iron, copper, fish, timber, cod-liver oil, turpentine, and horses.

Cities.—CHRISTIANIA, the nominal capital, at the head of Christiania Bay, is the chief seat of foreign trade. BERGEN, on the western coast, derives its chief importance from being the entrepôt of the Norwegian fisheries.

THE KINGDOM OF SWEDEN.

Geographical Position.—Sweden occupies the eastern and larger portion of the Scandinavian Peninsula.

Physical Features.—The country is mostly level, abounding in lakes and small rivers. One-fourth of the surface is covered with forests of beech, oak, fir, pine, birch, etc.

Soil, etc.—The soil is not generally good, and only a small part of the country is under cultivation. During the winter, which lasts about seven months, the ground is covered with snow. The products resemble those of Norway, except that here a surplus of corn is raised, while in Norway there is not enough for home use.

Natural Curiosities.—There are several interesting cataracts, the most noted of which are the Falls of Trollhætta (*trol-het'ta*), in the River Göta, about fifty miles from Gottenburg.

Inhabitants, etc.—The inhabitants are styled Swedes. They are of the same origin, and speak a different dialect of the same language, as the Norwegians. The leading pursuits are the rearing of live-stock, mining, and commerce. The prevailing religion is that of the Lutheran church.

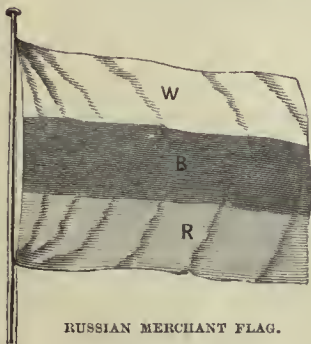
Traveling Facilities.—These are similar to those of Norway, with the addition of canals, by which water communication is maintained from the Baltic Sea to the Strait of Cattegat, across the southern part of Sweden.

Manufactures and Exports.—Manufactures are not extensive. The exports are mainly timber, grains, and the produce of the mines.

Cities, etc.—STOCKHOLM, the capital of Norway and Sweden, which are united under one government, is built on some small islands, at the entrance of Lake Ma'lar. Its situation is extremely picturesque, and it is the chief commercial emporium of Sweden. GOTTENBURG, at the mouth of the Göta, ranks second in commercial importance. CARLSRONA, situated on some small islands off the southern coast, is the naval arsenal of Sweden.

LESSON CXXVI.

THE EMPIRE OF RUSSIA (EUROPEAN).



RUSSIAN MERCHANT FLAG.

Geographical Position, etc.—This vast empire occupies the eastern portion of Europe. Its length, from the Black Sea to the Arctic Ocean, is about 1,700 miles.

Physical Features.—The country is chiefly a plain. The Ural Mountains, in the eastern part, divide Russia in Europe from Russia in Asia.

Soil, etc.—In the north the soil is marshy and poor, and there may be said to be only two seasons, the heat of summer being immediately followed by the

frost and snow of winter. In the south, the land is tolerably fertile, and the climate temperate.

Forests are numerous, and furnish timber, pitch, potash, and turpentine, in abundance. Fur-bearing animals abound along the borders of the Arctic Ocean. Corn, rye, and barley, are among the important products. Fruits flourish in the south, and cattle are numerous in every part of the empire. The most extensive iron-works of Russia are near Lake Onega.

Inhabitants, etc.—The inhabitants are chiefly of the Slavonic race. Tartars inhabit the south-eastern part of the empire. Agriculture and commerce are the leading pursuits. The Greek church prevails.

Traveling Facilities.—Much attention has been given of late to the con-

struction of railroads. By means of canals, the seas, lakes, and rivers of the empire are united in a complete system of internal navigation.

Manufactures and Exports.—Manufactures are on the increase; among the most important articles are glass, metal-wares, hempen fabrics, and leather. The foreign trade of Russia consists in the exchange of her native products, such as tallow, hides, grain, iron, hemp, furs, and timber, for the luxuries and finer manufactures of other countries.

Cities, etc.—ST. PETERSBURG, the capital and chief commercial city, is built partly on islands at the mouth of the River Neva, and partly on the adjacent main-land. Communication between different parts of the city is kept up in summer by bridges of boats; and on the ice, in winter.

MOSCOW, situated on the River Moskva, is a large city, and the center of a great inland commerce. WARSAW, the ancient capital of Poland, has lost much of its importance since the downfall of Polish independence, though it is still the great seat of trade for Russian Poland.

ARCHANGEL, on the right bank of the Dwina, is the chief seaport of northern Russia; and ODESSA, on the north-western shore of the Black Sea, is the principal emporium of the south. ASTRACHAN, on an island in the Volga, is the center of the maritime commerce of Russia with western Asia, and the chief seat of the fisheries of the Caspian Sea and the Volga.

LAPLAND, a cold and barren country of northern Europe, belongs partly to Russia and partly to Sweden; its boundaries are not very definite.

In winter, the cold is excessive; the summers are hot and very short. In the parts north of the Arctic Circle, the sun is constantly visible for a number of weeks about midsummer, and invisible for the same period about Christmas. The Laplanders live chiefly in tents, and are clothed with skins of reindeer and other animals. Herds of reindeer constitute the wealth of the inhabitants. With a couple of these animals attached to a small sledge, a Laplander will travel fifty or sixty miles a day.

THE CAUCASIAN PROVINCES.—This name is applied to the countries between the Black and the Caspian Sea, including Caucasus, Daghestan (*dah-ghis-tahn*), and Circassia, in Europe, and Georgia, in Asia. These provinces are under the dominion of Russia, except Circassia, which, though claimed by Russia, is in fact independent. The Circassians are regarded as the finest type of the human family. Georgia will be treated of among the countries of Asia, to which, geographically, it belongs.

THE EMPIRE OF TURKEY (EUROPEAN).

Geographical Position.—European Turkey occupies part of the most easterly of the three great peninsulas of southern Europe.

Physical Features.—A chain of mountains traverses the central part of Turkey, from which a diverging branch passes south into Greece. The other principal mountains are the Carpathian, on the northern frontier, and the Dinaric (*de-när'ie*) Alps in the north-west.

Soil, etc.—The soil is exceedingly fertile; but only a small portion is cultivated. The climate in the north is changeable, while in the south it is generally mild and pleasant, though not warm for the latitude. Rice, cotton, tobacco, hemp, flax, and barley, are cultivated in the central and northern districts; grapes, figs, olives, oranges, and other fruits, are plentiful in the south. Turkey is noted for its opium and rhubarb.

The southern base of the Balkan Range is remarkable for the abundance of its roses, from which the celebrated *attar*, or otto, of roses is distilled.

Inhabitants, etc.—The Turks, though but a small part of the population, are the ruling people. The rest of the inhabitants are mostly Greeks, Armenians, and Jews. The Turks spend much of their time in the bagnios (*ban'yoze*), or baths. They sit, eat, and sleep, on the floor, on cushions, or sofa mattresses and carpets. The women, when they appear in the streets, are so muffled and veiled that they cannot be recognized. The Turks are Mohammedans; most of the other inhabitants belong to the Greek church.

Traveling Facilities.—Very few of the roads are passable for carriages; horses or mules are generally employed for the conveyance of both passengers and goods. There are neither canals nor railroads.

Manufactures and Exports.—The manufactures of Turkey are chiefly carpets, silks, and goat-skin morocco. The chief exports consist of these articles, together with leeches and various drugs and fruits.

Cities.—**CONSTANTINOPLE**, the capital of both European and Asiatic Turkey, is built on a tongue of land on the west side of the Strait of Bosphorus, and on a bay known as "the Golden Horn."

ADRIANOPLE, the second city of Turkey in population, lies near the Maritza, in one of the most fertile plains in the world. Its mosques and public baths are numerous. **SALONICA**, at the head of the Gulf of Salonica, is, next to Constantinople, the most important commercial city.

THE KINGDOM OF GREECE.

Geographical Position, etc.—This small kingdom lies south of Turkey. The southern part forms a peninsula called the Morea, which is connected with northern Greece by the Isthmus of Corinth.

Physical Features.—The surface is mountainous, interspersed with valleys.

Soil, etc.—The soil is fertile in the valleys, and the climate is warm and delightful. The winter is short. The chief productions are grain, rice, cotton, figs, dates, pomegranates, citron, oranges, honey, etc. Sheep and goats are numerous. The flesh of goats is used for food, and their skins are made into vessels for holding wine, oil, honey, and other liquids.

Inhabitants, etc.—The inhabitants are the mixed offspring of the descendants of the ancient Greeks, and the various nations of Slavonic origin. A large portion of them are shepherds. The Greek church prevails.

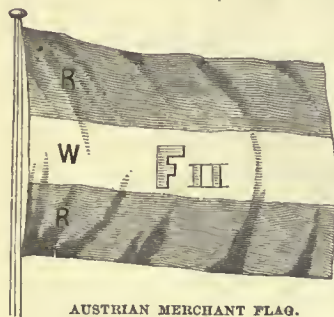
Travelling Facilities.—These are similar to those of European Turkey. There are few roads in the interior of the country.

Manufactures and Exports.—Manufactures are few; the exports are mainly currants, cotton, olive-oil, valonia (a species of acorn used by tanners), drugs, and dried fruits.

Cities, etc.—**ATHENS**, the capital, situated in a small plain near the Gulf of Egina, is celebrated chiefly for the numerous remains of its former works of art. The principal of these is the Acropolis, or citadel, which crowns the summit of a lofty hill in the midst of the city. Athens is also noted as having been the birth-place of the most illustrious sages, philosophers, warriors, and poets, of ancient times. **PATRAS**, on the Gulf of Patras, is the principal seat of the foreign trade of Greece.

LESSON CXXVII.

THE EMPIRE OF AUSTRIA.



AUSTRIAN MERCHANT FLAG.

Geographical Position, etc.—This extensive empire is situated in central Europe, and extends from Germany, Prussia, and Russia on the north, to Italy and Turkey on the south. Its principal divisions are Bohemia, Moravia, the Archduchy of Austria, Styria, Illyria, Tyrol, Galicia or Austrian Poland, Hungary, Transylvania, Banat (*bah-nah't*), Slavonia, Croatia, Dalmatia, and the Military Frontier.

Physical Features.—The surface is considerably diversified. It is traversed by the Alps, the Carpathian Mountains, and other ranges. In Slavonia and Hungary are extensive plains and marshes.

Soil, etc.—The soil is generally good. The climate is cool and clear in the north, but moist, warm, and frequently cloudy in the south.

Grain, flax, hemp, rice, olives, vines, hops, tobacco, and a great variety of fruits, are among the chief agricultural products. Hungary produces more wine than any other country in Europe, except France. Leeches are numerous in the marshy districts of the empire. In minerals, Austria ranks among the richest countries of Europe.

Inhabitants, etc.—The inhabitants belong to three principal families; the German, Slavonian, and Hungarian or Magyar. Agriculture, mining, and the raising of sheep, form the leading pursuits. The religion is Roman Catholic.

Traveling Facilities.—Commodious roads have been constructed across upward of sixty of the mountain passes of the empire. Besides these, there are numerous other highways and several railroads.

Manufactures and Exports.—Silk, wool, cotton, glass, flax, and paper, are among the chief articles manufactured; but Austria is not noted as a manufacturing country. The leading exports are corn, wine, wool, minerals, timber, hides, porcelain, glass, leeches, and cattle.

Cities, etc.—**VIENNA**, the capital of Austria, situated on an arm of the Danube, is the great center of inland commerce, and the chief manufacturing city of the empire. **PRAGUE**, the capital of Bohemia, with its numerous domes, turrets, and spires, looks like an oriental city.

TRIESTE, situated near the head of the Adriatic Sea, is the chief seat of the foreign commerce of the empire. Ship-building is here extensively carried on. **LEMBERG**, the capital of Galicia, is noted for its January Fair, which lasts six weeks. Furs are brought from Siberia and Tartary, and exchanged for hardware and woolen and cotton goods.

BUDA, the capital of Hungary, on the western side of the Danube, communicates by a handsome suspension-bridge with **PESTU**, its chief commercial city. The Legislative Assembly of Hungary meet at **PRESBURG**, on the left bank of the Danube, thirty-five miles below Vienna.



THE RIALTO, VENICE.

THE KINGDOM OF ITALY.

Geographical Position, etc.—Italy occupies the great central peninsula of southern Europe. It was formerly divided into several separate kingdoms, duchies, etc.; but at present all these, except the States of the Church, which are ruled by the Pope, and the Republic of San Marino (*mah-re'no*), are united under one government, known as the Kingdom of Italy.

Physical Features.—The country is generally mountainous, though there are some level districts in the north and west. The Apennines traverse the peninsula from north-west to south-east.

Soil, etc.—The soil is remarkable for its fertility, and the climate is warm and delightful. Wheat, corn, rice, cotton, silk, olives, and a great variety of fruits, are among the principal productions. In the south, the sugarcane, orange, and fig, are cultivated. Iron, lead, sulphur, alabaster, lava, and marble, are found in considerable quantities.

Inhabitants, etc.—The Italians are not one of the primitive tribes of Europe, but a mixed race, descendants of Greeks, Germans, Gauls, etc. Agriculture is the leading pursuit. The religion is Roman Catholic.

Travelling Facilities.—The principal roads are well built and kept in good order. The important cities are connected by railroads. In the north are numerous passes over the Alps, by which, with the aid of mules, communication is carried on with France, Switzerland, and Germany.

Manufactures and Exports.—The manufactures of Italy, if we except silk, straw hats, artificial flowers, and musical instruments, are not extensive. The chief exports are raw silk, kid and lamb skins, olive-oil, straw hats, wines, fruits, coral, anchovies, sulphur, cheese, and perfumery.

Cities, etc.—FLORENCE, the capital of the Kingdom of Italy, and the chief city of Tuscany, lies in a delightful valley, on both sides of the river Arno. It is celebrated for its collections of paintings and statues.

NAPLES, delightfully situated on a bay of the same name, is the most populous city of Italy. In its vicinity are Mount Vesuvius, and the ancient buried cities of Herculaneum and Pompeii (*pom-pa'ye*).

MILAN lies in the midst of the plain of Lombardy, on a branch of the Po. It is noted for its cathedral, one of the grandest specimens of architecture extant, and for being the greatest book-mart in Italy. VENICE, formerly for many centuries the first commercial city of the world, is built on 72 small islands, which are joined by 309 bridges. The chief thoroughfares are canals; and communication between different parts of the city is carried on by means of light boats, called gondolas.

TURIN, formerly capital of the Kingdom of Italy, is situated in a delightful valley on the left side of the River Po. As regards literary and scientific institutions, it ranks first among the Italian cities.

GENOA, an important naval station and the chief commercial city of Italy, stands near the head of the gulf of the same name. LEGHORN is a busy seaport on the Mediterranean coast; ship-building is extensively carried on at this place.

SICILY, the largest island of the Mediterranean and an important part of the Kingdom of Italy, lies south-west of the Italian peninsula, from which it is supposed to have been separated by some convulsion of nature.

The climate is very warm, and the cold in winter is never so severe as to affect the verdure. The sulphur-mines of Sicily are numerous and important. The principal objects of culture are different kinds of grain, the vine, and the olive.

The most interesting natural feature of Sicily is Mt. Etna. This volcano, entirely isolated from other mountains, has the form of an immense cone. Its base is about 87 miles in circuit, and its height is nearly 11,000 feet.

PALERMO, the chief city of the island, is the residence of the military commandant, and contains an arsenal and ship-yard.



MOUNT ETNA, SICILY.

SARDINIA, the second island of the Mediterranean in size, lies 120 miles west of Italy. Its forests are extensive, and furnish excellent timber for ship-building. The climate is unhealthy. Agriculture is conducted in the rudest manner. Cheese, made of the milk of sheep and goats, is largely exported. Sardinia forms part of the Kingdom of Italy.

THE STATES OF THE CHURCH, called also "the Papal States," and "the Pontifical States," form a narrow strip of territory on the western coast,

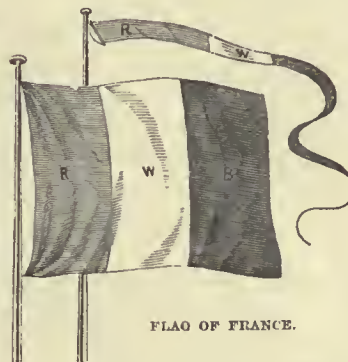
about midway of the Italian peninsula. They are not included in the Kingdom of Italy, but are under the dominion of the Pope.

ROME, the capital, is situated on both sides of the Tiber, sixteen miles above its mouth. It is the residence of the Pope, and is noted for the number and splendor of its churches. St. Peter's Cathedral covers nearly five acres, and is the most magnificent ecclesiastical structure in the world. Near it is the Vatican, a palace belonging to the Pope, having more than four thousand apartments.

SAN MARINO, a small but ancient republic, having an area of only 22 square miles, lies in the eastern part of Italy, near the Adriatic. It consists of a craggy mountain about 2,200 feet in height, on the top of which the town of San Marino is situated.

LESSON CXXVIII.

THE EMPIRE OF FRANCE.



Geographical Position.—France, an important empire of western Europe, extends from the English Channel on the north to the Mediterranean Sea on the south, and from Germany, Switzerland, and Italy, to the Atlantic.

Physical Features.—The surface is mountainous in the eastern and southern parts, and level or undulating in the north and north-west.

Soil, etc.—The soil is exceedingly fertile, and the climate mild and agreeable.

Grain is generally grown on the higher grounds; but maize is everywhere common. Madder, from which a dye is obtained, is cultivated in some districts. The beet-root, used in the manufacture of sugar, is extensively raised. Bees and the silk-worm are reared in the south. The forests furnish excellent timber for ship-building. Silk, wool, wines, olive-oil, and a great variety of fruits, are among the most important products. The chief minerals are iron, coal, and salt.

Inhabitants, etc.—France is inhabited by a mixed race, in which the Celtic element predominates. In the parts bordering on the Rhine, the people are mostly of German descent. More than half the inhabitants are engaged in agricultural pursuits, of which the culture of the vine forms an important feature. The French are, for the most part, Roman Catholics.

Travelling Facilities.—The high-roads are numerous and good. Railroads connect Paris with the most important towns on the English Channel and on the Belgian frontier. Rivers and canals afford facilities of communication for a distance of more than 8,000 miles.

Manufactures and Exports.—In extent and variety of manufactures, France ranks second only to Great Britain; in the beauty of her silk fabrics, she holds the first rank. The leading manufactures and exports are woollens, linens, laces, hardware, cotton fabrics, paper, gloves, wine, brandy, and a great variety of fancy articles. Commerce is extensively carried on.

Cities, etc.—PARIS, the capital, lies on both banks of the Seine, and on two islands in that river, 111 miles above its mouth. It extends for about five miles along the river, and is surrounded by walls, entered by gates. Its public structures are numerous and magnificent. Paris is the second city in Europe in population, and in scientific, literary, and educational establishments, it surpasses all other cities in the world. Twelve miles west of Paris is VERSAILLES, noted for its magnificent palace.

HAVRE, at the mouth of the Seine, an important commercial city, communicates regularly by steam-packets with New York and various European ports. LYONS, at the junction of the Rhone and the Saone, is the second city in France in commercial importance, and the chief seat of the manufacture of silks, velvets, etc. MARSEILLES, on the east side of the Gulf of

Lyons, is extensively engaged in the exportation of wines, fruits, and other productions of southern France. CALAIS, a fortified seaport on the Strait of Dover, owes its importance chiefly to its proximity to England.

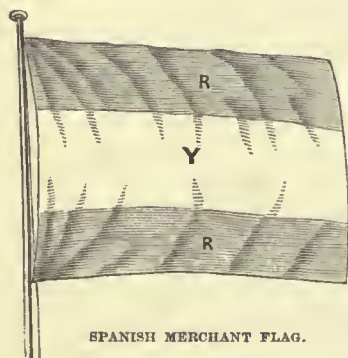
BORDEAUX, on the left bank of the Garonne, is the great emporium of the wine-trade, and the chief port on the Bay of Biscay. NANTES, on the right bank of the Loire, carries on considerable trade with northern Germany, Sweden, Denmark, and Russia.

CORSICA, an island in the Mediterranean, west of the Italian peninsula, belongs to France. The soil is fertile, but very badly cultivated. The rearing of live-stock is the chief branch of industry. Timber is abundant, bees are numerous, and most of the fruits common in southern France grow upon the island. Beautiful coral is found on the southern coast, and forms an important article of export.

AJACCIO (*ah-yah't'cho*), the capital, is noted as the birth-place of Napoleon Bonaparte.

FRENCH COLONIAL POSSESSIONS.—The chief colonial possessions of France are:—The territory of Algeria, in northern Africa; the island of Bourbon, in the Indian Ocean; St. Louis, at the mouth of the Senegal, in western Africa; the small islands of St. Pierre and Miquelon (*mik-eh-lon'*), in the Gulf of St. Lawrence; the islands of Guadeloupe and Martinique, in the West Indies; French Guiana, in South America; Pondicherry and a few other settlements in Hindostan; the Marquesas (*mar-ka'sas*) Isles and the island of Tahiti (*tah-he'te*), in Polynesia; and New Caledonia, in Australasia.

THE KINGDOM OF SPAIN.



SPANISH MERCHANT FLAG.

Geographical Position.—This kingdom occupies the greater part of the most westerly of the three peninsulas of southern Europe.

Physical Features.—The interior of Spain consists of high table-lands surrounded by mountains. In the south and south-east are plains, which slope gradually toward the Mediterranean.

Soil, etc.—The soil is generally fertile, but there are extensive waste lands. In the north, the climate is temperate; the apple-tree flourishes, the hills are

clothed with forests, and the valleys yield rich harvests of grain. The high plateaus of the center are destitute of trees, and the climate is noted for its dryness. In the warm regions of the south, the fig, the olive, the vine, and sugar-cane, are cultivated. Fruits are abundant.

Inhabitants, etc.—The Spaniards are a mixed race, derived mainly from the Celts, Goths, Romans, and Arabians. There are about 50,000 gypsies in different parts of Spain. Agriculture and the rearing of sheep form the leading pursuits; great attention is paid to the culture of the grape. The inhabitants are mostly Roman Catholics.

Traveling Facilities.—Traveling facilities are exceedingly limited. Wheel-carriages are but little used, and mules furnish the chief means of transport. There are several canals, though but few that are adapted to navigation.

Manufactures and Exports.—Among the leading manufactures are silks, leather, fire-arms, saltpetre, and gunpowder. The exports are wines, brandies, oil, fruits, wool, silk, barilla, quicksilver, lead, and salt. Neither agriculture, commerce, nor manufactures, are in a flourishing condition.

Cities, etc.—MADRID, the capital, is situated near the Manzanares (*mahn-thah-nah'res*). It is nearly eight miles in circuit, and is surrounded by walls. The palace of the Escorial, twenty-seven miles north-west of the city, contains splendid mausoleums of many of the sovereigns of Spain; also, a fine collection of paintings, a large library, and a college.

BARCELONA, on the Mediterranean coast, is the second city in the kingdom in population, and is an important manufacturing and commercial

place. MALAGA, on the Mediterranean coast, about 250 miles south of Madrid, is noted for the export of wines, raisins, figs, and other fruit.

CADIZ, on the island of Leon, is an important commercial city. SEVILLE, on the left bank of the Guadalquivir, is noted for its trade in oranges.

GIBRALTAR, on a mountainous promontory, is a strongly fortified seaport and belongs to Great Britain. It is a station for the English packets connected with the Indian and Mediterranean trade.

THE BALEARIC ISLES consist of Minorca, Majorca, Iviça (*e-ve'sah*), and some smaller islands lying east of Spain, to which country they belong. They yield an abundance of grain and fruit.

PALMA (*pahl'mah*), the capital of the Balearic Isles, is situated on the island of Majorca. PORT MAJON (*mah-hone'*), on the island of Minorca, has one of the best harbors in the Mediterranean.

SPANISH COLONIAL POSSESSIONS.—The chief of these are as follows:—A part of the Philippine Isles; the islands of Cuba and Porto Rico, in the West Indies; and Centa (*su'tā*), a fortress in Africa, on the south side of the Strait of Gibraltar.

ANDORRA.—This small independent state comprises three wild and picturesque valleys, situated on the southern side of the central Pyrenees. It is subject to the spiritual jurisdiction of the Bishop of Urgel (*oor-hel'*), in Spain, to whom it pays annually about ninety dollars; while it renders to France double that amount, for certain privileges which it enjoys from her protection.

THE KINGDOM OF PORTUGAL.

Geographical Position.—This small kingdom of south-western Europe occupies about one-sixth of the Iberian peninsula.

Physical Features.—The surface is agreeably diversified, and gradually slopes toward the Atlantic Ocean.

Soil, etc.—The soil is rich, and the climate mild and healthy. The productions are like those of Spain. The vine flourishes in the northern provinces; the olive, orange, citron, and other fruits, in the southern. Iron ore and fine marble and building-stones abound.

Inhabitants, etc.—The inhabitants are of the same lineage as those of Spain, and belong to the Roman Catholic church. Agriculture is in a backward state. The making of wine forms the chief branch of industry.

Travelling Facilities.—These are poor. There are no canals or railroads at present in the kingdom, and the navigation of the rivers is sometimes prevented by low water occasioned by drought.

Manufactures and Exports.—Manufactures are not extensive. The exports are mainly wines, salt, cork, drugs, and various kinds of fruit.

Cities.—LISBON, the capital, on the right bank of the Tagus, stands first in commercial importance; and OPORTO, noted for its trade in port-wine, ranks second. COIMBRA, on the high-road between these cities, is noted for its University,—the only one in Portugal.

PORTUGUESE COLONIAL POSSESSIONS.—Portugal possesses the Azores, Madeira, and Cape Verde Isles; some small settlements on the coast of Senegambia, in Africa, together with Mozambique (*mo-zam-beek'*); three small islands in the Gulf of Guinea; and a few settlements in the East Indies.

LESSON CXXIX.

THE KINGDOM OF BELGIUM.

Geographical Position.—This small kingdom of western Europe lies between France and Holland.

Physical Features.—Belgium is mostly level. The coasts are low, requiring dikes to protect them from the sea. The country is well watered.

Soil, etc.—The soil is not naturally fertile, but the industry and skill of the inhabitants have rendered it very productive.

The climate is cool and moist. The chief products are grain, hemp, flax, hops, beet-root, chicory, clover, and tobacco. Coal and iron abound.



ANTWERP CATHEDRAL, BELGIUM.

Inhabitants, etc.—The Belgians are in part Flemings, of German origin; and in part Walloons, descendants of the ancient Belgæ. Agriculture, commerce, and manufactures, form the leading pursuits. The Roman Catholic church prevails.

Travelling Facilities.—Excellent roads, canals, and railroads, are numerous.

Manufactures and Exports.—Manufactures are the chief source of wealth. The exports are agricultural products, and a great variety of manufactured goods,—such as laces, fine linens, paper, hardware, etc.

Cities, etc.—BRUSSELS, the capital, situated on the Senne, is celebrated for its lace, considered the finest in the world, and for its carriages. Nine miles south of Brussels is the field of Waterloo, memorable for the great battle fought there in 1815.

GHENT, an important man-

ufacturing city, situated in a fertile plain at the confluence of the Lys and the Scheldt, ranks next to Brussels in population. ANTWERP, on the right bank of the Scheldt, is the great emporium of Belgian commerce.

LIEGE, on the left bank of the Meuse, in the vicinity of rich coal-mines, is the chief seat of the iron-works of Belgium. OSTEND, on the North Sea, is an important seaport.

THE KINGDOM OF HOLLAND.



FLAG OF HOLLAND.

Geographical Position.—Holland, or the Kingdom of the Netherlands, lies north of Belgium, and west of Prussia.

Physical Features.—The face of the country is low and flat, intersected by numerous canals. Being below the level of high sea-tides, it is protected either by sand-banks thrown up by the sea or by artificial dikes.

Soil, etc.—The soil is fertile, and the climate mild and humid. The winters, however, are generally severe.

The productions are similar to those of Belgium. Fine cattle and horses abound. Immense quantities of butter and cheese are made.

Inhabitants, etc.—The inhabitants, who are called Dutch, belong mostly to the German stock; there are, also, numerous Jews. More attention is paid to the rearing of live-stock and to the dairy, than to tillage. Protestantism prevails.

Travelling Facilities.—The internal trade is carried on mainly by means of canals, which in Holland serve the purposes of roads elsewhere.

Manufactures and Exports.—The chief manufactures are linens, velvets, paper, leather, earthenware, and gin. Butter and cheese are largely exported.

Cities.—THE HAGUE, one of the handsomest cities on the Continent, is the capital. AMSTERDAM, the largest city and chief commercial emporium, stands at the confluence of the Amstel and a branch of the Zuider Zee; it is built on piles, and intersected by numerous canals. ROTTERDAM, on the Meuse, ranks second in size and commercial importance.

DUTCH COLONIAL POSSESSIONS.—The chief foreign possessions of Hol-

land are Java, parts of Sumatra, Borneo, and Celebes, with several small islands in Oceania; some ports on the coast of Guinea, in Africa; Dutch Guiana, in South America; and the islands of Buen Ayre, Curaçoa, and Oruba, in the West Indies.

THE KINGDOM OF PRUSSIA.

Geographical Position.—Prussia lies in central Europe, extending from Russia on the east to Holland and Belgium on the west, and from Denmark, the North, and the Baltic Sea, to the South German States, Saxony, and Austria.

Physical Features.—The surface is generally level; forests abound.

Soil, etc.—Along the Rhine, Vistula, Oder, and Elbe, the soil is fertile; in other parts, it is less productive. The climate is mild; in the western part it is warm enough for the vine to flourish. The chief productions are grain, hemp, flax, hops, tobacco, and beet-root. Sheep, swine, and bees, are extensively raised. Mines of copper, iron, and lead, are worked. Amber is found on the shores of the Baltic.

Inhabitants, etc.—The inhabitants are chiefly Germans, but in some parts of eastern Prussia they are mostly of Slavonic origin. Jews are numerous in the cities. About three-fourths of the inhabitants are engaged in agriculture. Protestantism prevails.

Travelling Facilities.—Railroads extend in every direction. Canals are not numerous; but the rivers afford great facilities for inland navigation.

Manufactures and Exports.—The leading manufactures are linen and woollen fabrics; the chief exports are corn, timber, wool, and manufactured goods.

Cities, etc.—BERLIN, the capital, on both sides of the Spree, contains many splendid edifices, besides the Royal Library and University. BRESLAU is the second city in population and importance. DANTZIG and STETTIN are the chief seats of foreign commerce. COLOGNE, on the left bank of the Rhine, is noted for its grand cathedral.

FRANKFORT, the center of a large inland trade, and formerly the capital of the Germanic Confederation, stands on the right bank of the Main.

LESSON CXXX.

THE KINGDOM OF DENMARK.

Geographical Position, etc.—This kingdom lies north of Prussia, between the Baltic and the North Sea. It comprises the peninsula of Jutland, and a group of islands lying in the Baltic. The duchies of Sleswick and Holstein, which formerly belonged to Denmark, now form part of Prussia.

Physical Features.—The surface is almost a perfect flat. In some parts, the coast is protected from inundations of the sea by dikes.

Soil, etc.—The soil near the coasts is good, but in the interior there are large tracts covered with heath. The climate is humid, but mild for the latitude. Wheat and oats are extensively cultivated. Geese, ducks, and other birds, are numerous; their feathers form an important article of traffic. Peat is the principal fuel,—there being no coal except what is imported, and but few forests. The pastures of Denmark are its chief source of wealth.

Inhabitants.—The inhabitants (called Danes) belong to the Teutonic, or German, family of nations. Agriculture is the leading pursuit. The religion is that of the Lutheran church.

Travelling Facilities.—The roads in Zealand and other islands are good, but elsewhere poor. Railroads have been introduced to a limited extent.

Manufactures and Exports.—As Denmark contains neither iron, coal, nor water-power, its manufactures are few. Cheese and butter are made in abundance, and distillation and brewing are extensively carried on. The exports are agricultural products, live-stock, fish, beer, and brandy.

Cities, etc.—COPENHAGEN, the capital and largest city, is situated partly on the eastern coast of Zealand, and partly on the adjacent island of Amak. ELISNORE, on the island of Zealand, 25 miles north of Copenhagen, is a

small commercial town, where all merchant-ships passing into or out of the Baltic (except Danish or Swedish) formerly paid toll.

ODEN'SE, the capital of the island of Funen, is the second city of the kingdom in population.

THE NORTH GERMAN CONFEDERATION.

The North German Confederation, formed in 1866, consists of twenty-two states, including the kingdoms of Prussia and Saxony, the duchies of Mecklenburg, Oldenburg, and Brunswick, the Saxons or Saxon duchies, and the three free cities of Bremen, Hamburg, and Lubeck.

The objects of the Confederation are mutual defence against foreign foes, and the maintenance of internal security and peace. Its affairs are regulated by an assembly composed of representatives from the several states. Each state exercises a sovereign and independent power over its own territory, and has its own capital city.

THE KINGDOM OF SAXONY.—Saxony, next to Prussia, is the most important state of the North German Confederation. It lies between Prussia on the north and Austria on the south.

The rearing of cattle forms an important branch of industry; and immense flocks of sheep are raised, the wool of which is largely exported. Mining occupies a great part of the inhabitants, there being more than five hundred mines in active operation. Manufactures are extensive. The people are mostly Lutherans.

DRESDEN, the capital, lies on both banks of the Elbe. It is noted for its china and porcelain ware, its gallery of paintings, and the beauty of its environs. LEIPZIG is the great emporium of the book-trade.

MECKLENBURG AND OLDENBURG.—Mecklenburg borders on the Baltic, and Oldenburg on the North Sea. The surface of these grand-duchies is flat. Except in parts of Oldenburg, where there are tracks of barren heath, the soil is fertile, producing good crops of wheat, beans, etc.

BRUNSWICK lies inland, surrounded mostly by Prussian territory. The surface is hilly. Valuable mineral products abound. Manufactures and commerce are in a flourishing state. BRUNSWICK, the capital, is an important railroad center and the seat of an active trade.

THE FREE CITIES.—HAMBURG, situated on the north bank of the Elbe, about seventy miles from its mouth, is the great seaport of Germany, and one of the most important commercial cities in the world.

BREMEN, on both sides of the River Weser, is second only to Hamburg as a seat of German commerce. It is a noted place of embarkation for emigrants to America.

LUBECK, situated on the Trave, a few miles from the Baltic, carries on an extensive transit trade.

THE SOUTH GERMAN STATES.

Geographical Position, etc.—The principal South German States are the grand duchy of Baden and the kingdoms of Wurtemberg and Bavaria. Their territories, which are contiguous, lie north of Switzerland and Tyrol, between Austria on the east and France on the west.

Physical Features.—The surface is hilly or mountainous. Extensive forests abound, among which the Black Forest, covering four-fifths of the surface of Baden, is particularly noted.

Soil, etc.—The soil is for the most part fertile, and the climate mild and healthy. Various kinds of grain, hops, flax, and fruits are among the most important agricultural products. Wood is a staple, and is largely exported.

Inhabitants, etc.—The inhabitants belong to the Teutonic race. The

leading branches of industry are agriculture and cattle-rearing. Manufactures are important, among which the making of wine, and in Bavaria the brewing of beer, may be specially mentioned. Commerce receives attention. Protestantism prevails in Wurtemberg; the Roman Catholic church, in Baden and Bavaria.

Cities.—CARLSRUHE is the capital of Baden, and STUTTGART of Wurtemberg. MUNICH, the capital of Bavaria, lies on the west bank of the Isar (*Isar*), a branch of the Danube. It is celebrated for its literary institutions and splendid galleries of paintings and sculpture.

NUREMBERG, the second city of Bavaria in point of population, is noted for the manufacture of wooden clocks, toys, jewelry, and mathematical and musical instruments; watches were invented at this place.

THE REPUBLIC OF SWITZERLAND.

Geographical Position.—Switzerland, a small inland country of central Europe, lies east of France, between Germany and Italy.



FALLS OF SCHAFFHAUSEN.

Physical Features.—Lofty mountains and vast glaciers, beautiful lakes and smiling valleys, alpine streams and glittering water-falls, diversify the scenery.

Soil, etc.—The soil is fertile in the valleys. The climate is cold on the mountains, temperate on the plains, and hot in the valleys. Flax and hemp are extensively raised, but the wealth of Switzerland consists in its excellent pastures, which support immense numbers of cattle. The vine grows in the valleys. Mineral springs are numerous.

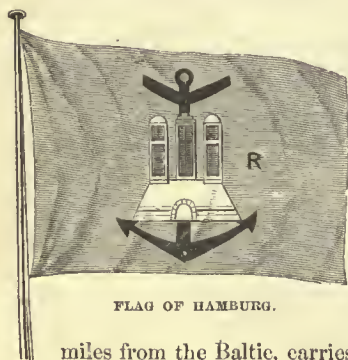
Natural Curiosities.—The Falls of Schaffhausen in the Rhine, and the Cataract of Staubbach, are much celebrated. The latter has a perpendicular fall of eight hundred and fifty feet.

Inhabitants, etc.—The inhabitants are mainly of Teutonic and Celtic origin. The raising of cattle and making of butter and cheese are the chief pursuits. Manufactures receive considerable attention. The people are partly Protestants and partly Roman Catholics.

Traveling Facilities.—These are generally good. Excellent roads lead across the mountains. Steamboats ply on the principal lakes.

Manufactures and Exports.—The making of watches, musical boxes, and jewelry, is extensively carried on. These articles, with cattle, cheese, butter, silk-stuffs, and ribbons, are the leading exports.

Cities, etc.—BERNE, on a small peninsula formed by the River Aar, is the capital. GENEVA, at the foot of Lake Geneva, is the most populous and chief manufacturing city of Switzerland; about 100,000 watches, chiefly gold, are annually made in this city. BASEL, or Basel, at the great bend of the Rhine, is noted for its trade, its manufacture of ribbons, and its numerous literary and scientific institutions. ZURICH, at the foot of a beautiful lake to which it gives name, is celebrated for its schools and for having given birth to many illustrious men.



FLAG OF HAMBURG.

LESSON CXXXI.

THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.



FLAG OF GREAT BRITAIN.

Geographical Position.—This kingdom consists of the two large islands of Great Britain and Ireland, and a number of smaller ones in their vicinity.

Government.—The form of government is an hereditary limited monarchy. The legislative power is shared between the Sovereign and two Houses of Parliament,—the House of Lords, and the House of Commons, consisting of delegates elected by certain classes of the people.

BRITISH COLONIAL POSSESSIONS.—Colonial possessions of the British Empire are found in every quarter of the globe, as follows:—

In America: British America, Balize, British Guiana, the Bermudas, several of the West India Islands, and the Falkland Isles.

In Europe: the town of Gibraltar in Spain, and the islands of Heligoland in the North Sea, and Malta and Gozo (*got'zo*) in the Mediterranean.

In Asia: British India, including Ceylon and Singapore, Aden in Arabia, and the island of Hong Kong off the coast of China.

In Africa: various settlements on the western coast, including Sierra Leone, also Cape Colony, British Caffraria, Natal (*nah-tahl'*), and the islands of Ascension, St. Hele'na, and Mauritius (*mau-rish'e-us*).

In Oceania: Australia, Van Diemen's Land, New Zealand, Norfolk Island, and Labuan (*lah-boo-ahn'*), an island in the Malay Archipelago.

SCOTLAND.

Geographical Position.—Scotland occupies the northern portion of the Island of Great Britain.

Physical Features.—Two-thirds of the surface is mountainous. The northern part is called the Highlands; the southern, the Lowlands.

Soil, etc.—The soil in some of the valleys, and on the eastern coast, is fertile; but in the mountainous districts it is barren. The climate is humid. The staple crop is oats; wheat and other grains are also cultivated. Sheep and cattle are reared in great numbers. Coal, iron, and lead, abound.

Natural Curiosity.—In the small island of Staffa, one of the Hebrides, is the remarkable Cave of Fingal. It is 237 feet long, from 20 to 50 feet broad, and from 60 to nearly 100 feet in height.

Inhabitants, etc.—The Highlanders are of the Celtic race, and speak what is called the Gaelic dialect; the Lowlanders are a mixed people, like the English. The chief pursuits are manufactures and commerce; the fisheries are an important branch of industry. The established church is Protestant.

Traveling Facilities.—Excellent roads extend through almost every part of the United Kingdom; canals and railroads are numerous.

Manufactures and Exports.—Cotton and linen goods are among the leading manufactures. There are also extensive iron-works. The principal exports are manufactured goods, agricultural produce, and cattle.

Cities, etc.—EDINBURGH, the capital, is noted for its castle and university; GLASGOW, on the Clyde, for being the largest city of Scotland, and the principal seat of manufactures and commerce; DUNDEE, for its linens; PAISLEY, for its shawls; and NEW ABERDEEN, for its extensive trade in agricultural products.

ENGLAND.

Geographical Position.—England occupies the southern and larger part of the Island of Great Britain.

Physical Features.—The surface is undulating, with low mountain chains in the north and west.

Soil, etc.—The soil, though not naturally fertile, has been made exceedingly productive by the industry of the inhabitants. The climate is humid and milder than in the same latitude on the Continent. Wheat is the chief agricultural product; garden vegetables are next in importance. Coal, iron, copper, salt, tin, and limestone, are abundant.

Inhabitants, etc.—The English are chiefly descendants of the ancient Saxons. Agriculture and mining are pursued; but manufactures and commerce are the chief sources of wealth. The established church is Protestant.

Manufactures and Exports.—In the amount and variety of her manufactures, and the extent of her commerce, England stands unequalled. Of the manufactured goods, those of cotton, wool, and iron, are the most important.

Cities, etc.—LONDON, the capital of England and metropolis of the British Empire, lies on both sides of the Thames, sixty miles from its mouth. It contains many splendid buildings, and is the largest and wealthiest, as well as the chief commercial, city in the world. LIVERPOOL, at the mouth of the Mersey, is the great port of the cotton-manufacturing district, and carries on an immense trade with all parts of the world.

MANCHESTER is noted for its cotton manufactures; LEEDS, for woollen goods; YORK, for its fine cathedral; SHEFFIELD, for cutlery; NOTTINGHAM and LEICESTER, for hosiery and lace; BIRMINGHAM, for hardware; KIDDERMINSTER, for carpets; GREENWICH, for its National Observatory; CAMBRIDGE and OXFORD, for their universities.

THE PRINCIPALITY OF WALES.—Wales occupies the western part of the island. It is mountainous and well watered, and abounds in picturesque scenery. Barley and oats are the chief grains raised. Iron, coal, and other minerals, are abundant. The inhabitants are chiefly of the Celtic race, descended from the ancient Britons. Woollen goods constitute the chief manufactures, and, with mineral produce and cattle, are the leading exports.

MERTHYR TYDFIL, the largest town, lies near extensive coal and iron mines. SWANSEA carries on an active trade, and is frequented as a watering-place. Menai Strait, which separates the island of Anglesea from Wales, is crossed by a remarkable tubular suspension bridge.

IRELAND.

Geographical Position.—Ireland is an island, lying west of Great Britain.

Physical Features.—The central part consists chiefly of vast plains, almost encircled by detached groups of mountains.

Soil, etc.—The soil is fertile in some parts, in others barren. The climate is more moist than that of England. Wheat, barley, and oats, are the principal crops next to potatoes, which form the chief food of the peasantry. Dairy farms are numerous. Great numbers of cattle are raised for exportation. The leading minerals are marble, granite, iron, and copper.

Natural Curiosities.—Among these, the Giant's Causeway, on the northern coast, is the most remarkable. It is composed of about 40,000 pillars of dark-colored basalt, from one to thirty feet high.

Inhabitants, etc.—Most of the inhabitants are of the Celtic race; they depend for subsistence chiefly on the culture of the soil. The Roman Catholic church prevails.

Manufactures and Exports.—The chief manufactured article is linen. Cotton goods are made near Belfast, and Irish poplin (a fabric of silk and worsted) is manufactured in Dublin. These, with dairy and agricultural produce, form the leading exports.

Cities, etc.—DUBLIN, the metropolis, on both sides of the Liffey, is distinguished for the magnificence of its edifices, which make it one of the finest cities in Europe. Six miles south-east of Dublin is KINGSTOWN, its seaport. CORK is the chief emporium of southern Ireland; QUEENSTOWN is its seaport. LIMERICK, on the Shannon, is noted for its coasting-trade, and the manufacture of lace and fish-hooks. BELFAST, the second city in population, is distinguished for its linen and cotton manufactures; WATERFORD, for its fine quay and harbor.

5 4 3 2 1 0 1 2 3

10 Longitude West 8 from Greenwich 6

A PART OF EUROPE N°1

4 Longitude East 6



English Miles

Longitude East 75 from Washington

GENERAL QUESTIONS

ON THE MAP OF A PART OF EUROPE NO. 1.

LESSON CXXXII.

Latitude.—Between what degrees of latitude does France lie? *Between about 42½° and 51° N. lat.* Which of the New England States are in the same latitude as southern France? What place in Maine is in nearly the same latitude as Bordeaux? *Eastport.* Between what degrees of latitude is Spain? *Between about 36° and 43½° N. lat.* What part of Spain is in the latitude of Virginia?

Longitude.—Between what degrees of longitude do Spain and Portugal lie? *Between about 9½° W. and 3½° E. lon.* Which has the greater west longitude, Madrid or Dublin? Lisbon or Dublin? Between what degrees of longitude is France? *Between about 4½° W. and 8½° E. lon.* What part of France does the meridian of Greenwich cross? What Spanish port is in nearly the same longitude as Paris?

Exercise with Scale of Miles.—Using the scale of miles as a measure, what do you find to be about the extreme breadth of Portugal? What is the shortest distance in a direct line from the Gulf of Lyons to the Bay of Biscay? From Cape Finisterre to Cape Creux (*kruh*)? What is the length of France, from Dunkirk to the Pyrenees?

Coast Lines.—What is the length of the coast line of France, including indentations? *About 1,500 miles.* On what two bodies of water is the greatest portion of this coast? On what body of water has Spain the greatest extent of coast? What is the general character of the Spanish coast? *It is rocky, but not very elevated.*

Boundaries.—Is France separated from Belgium by a natural or an artificial boundary? From what countries is France separated by natural boundaries? What lake forms part of the boundary between France and Switzerland? What mountains form part of this boundary? What three rivers form part of the boundary between Spain and Portugal? Which of these is on the north of Portugal?

Seaports of France.—What is the northernmost town of France? What is there remarkable in the history of Dunkirk? *It was sold by Charles II., of England, to Louis XIV., king of France.* What seaport of France is nearest to England? How far is Calais from Dover, in England? *Twenty-six miles.* Who held possession of Calais for more than two centuries? *The English.* What is the next seaport to Calais on the English Channel?

How is Cherbourg (*sher'burg*) situated? For what is Cherbourg noted? *For its strong defences and breakwater.* What is the westernmost place in France? For what is Brest noted? *For being the strongest port of France, and having one of the best harbors in Europe.* How is Bayonne (*bah-yon'*) situated? What were first made there? *Bayonets.* Name the principal ports on the Gulf of Lyons. How is Nice situated? To what kingdom did Nice formerly belong? *To Sardinia.*

LESSON CXXXIII.

Seaports of Spain.—Name the principal ports of Spain on the Bay of Biscay. How is La Coruña (*lah ko-roon'yah*), or Corun'na, situated? For what events is Corunna celebrated? *The Spanish Armada sailed from this port in 1588 for the subjugation of England; and near it the French were defeated in 1809 by the English under Sir John Moore, who was mortally wounded.*

What port is on the south-western coast, east of the mouth of the Guadiana? *Palos (pah'loce).* For what is Palos celebrated? *It was from this port that Columbus sailed on his memorable voyage, August 3, 1492.* What port is on the Isle of Leon? Name the three chief naval arsenals of Spain. *Cadiz, Cartagena, and Ferrol.*

Important Places in France.—In what direction is Lille (*leel*) from Calais? From what does Lille derive its importance? *From being the chief seat of the thread and cotton manufactures of France.* How is Amiens (*am'e-enz*) situated? Of what manufactures is it the seat? *Of extensive woollen manufactures.* How is Caen (*kon'*) situated?

For what are Bordeaux, Rheims (*reemz*), and Dijon (*de-zhôn'*) noted? *For their trade in wines.* Which of these places is farthest north? In what direction is St. Etienne from Lyons? For what is St. Etienne noted? *For the manufacture of hardware and ribbons.* In what part of France are Nismes (*neem*) and Avignon (*ä-veen-yôn'*)?

Important Places in Spain.—What places in Spain are celebrated for their universities? *Madrid, Seville, Salamanca, Valladolid, and Santiago.* Which of these places are on branches of the Douro? What places are memorable for sieges, and battles between the French and English, in the Peninsular War? *Salamanca, Saragossa, Badajos (bad-a-hoce'), St. Sebastian, Vitoria, etc.*

How is Cor'dova situated? By whom was Cordova founded? *By the Romans.* For what is it noted? *For having given birth to Seneca, Lucan, and other distinguished men; also, for having been for several centuries the splendid capital of the Moors in the West—at which time it contained 300 mosques and nearly a million of inhabitants.*

Important Places in Portugal.—What places in Portugal are north of the Douro River? How is Santarem (*sahn-tah-ren'*) situated? What seaports are on the southern coast? *Lagos (lah'goce) and Faro (fah'ro).* In what direction is Lisbon from Cadiz? From Madrid? Oporto from Barcelona?

LESSON CXXXIV.

Islands.—How are the Scilly Islands situated? What group lies off the north-western coast of France? Which is the largest of the Channel Islands? For what are the Channel Islands noted? *For their fine breed of cattle.* On what island is the city of Cadiz? Name two islands of the Balearic group, besides Majorca, Minorca, and Iviça. *Formentera (for-men-ta'rah) and Cabrera (kah-bra'rah).*

Capes.—Mention six capes on the coast of Spain. Which of these project into the Mediterranean? For what is Cape Trafalgar' memorable? *For a famous victory gained over the combined French and Spanish fleets by the English under Lord Nelson, who was killed in the action.* Where is Cape La Hague (*lah hayg*)?

Mountains.—In what part of France are the Cote d'Or (*kote dor*) Mountains? The Auvergne (*o-vayrn'*) Mountains? Where is Mt. Blanc? What is the highest peak of the Pyrenees? *Mt. Maladetta, 11,168 feet high.* What five mountain chains traverse Spain? Mention the loftiest mountain in Spain. *Mt. Mulahacen (moo-lah-ah-then'), a peak of the Sierra Nevada, 11,658 feet high.*

Rivers.—What river of Belgium rises in France? *The Meuse (muze).* What is the length of the Seine? *497 miles, for 350 of which it is navigable.* Name some of the branches of the Seine. Of the Rhone. Of the Loire. What is the length of the Loire? *645 miles.* With what rivers is it connected by canals? *With the Seine and Saone.*

What is the principal river of Spain? *T.* How long is the Tagus? *540 miles.* To what place is it navigable? *To Abrantes (ah-brahn'tes), in Portugal.* What is the principal river of Spain that empties into the Mediterranean? Name some other Spanish rivers that flow into the Mediterranean. *The Guadalquivir (gwah-dah-lah-ve-ar'), Jucar (hoo'kar), and Segura (sa-goo'rah).*

Voyages, etc.—On what waters would you sail in going from Lisbon to Seville? From Port Mahon to Nantes? From Nice to Bordeaux? With what port is Lyons connected by railroad? *M.* What city is the great railroad center of France? *Paris.* With what five places on the English Channel is Paris connected by railroad? *Dunkirk, C., B., D., and H.*

GENERAL QUESTIONS

ON THE MAP OF A PART OF EUROPE NO. 2.

LESSON CXXXV.

Latitude.—Between what degrees of latitude do Turkey and Greece extend? *Between about $36\frac{1}{2}^{\circ}$ and 48° N. lat.* What part of the eastern coast of North America is embraced within these parallels? *That part which extends from Pamlico Sound, N. C., to the Bay of Chaleur, New Brunswick.* What city of California is in nearly the same latitude as Athens? *San Francisco.*

Longitude.—Between what degrees of longitude does Turkey lie? *Between 16° and $29\frac{1}{2}^{\circ}$ E. lon.* What country of southern Africa is in about the same longitude? *Cape Colony.* What city of Denmark is in about the same longitude as Rome? *Copenhagen.* Between what degrees of longitude is Austria situated? *Between about $8\frac{1}{2}^{\circ}$ and $26\frac{1}{2}^{\circ}$ E. lon.*

Exercise with Scale of Miles.—What is the distance from Florence to Vienna in a direct line? From Constantinople to Rome? What is the extreme length of Austria from east to west? Of Switzerland? What is the length of Sardinia?

Boundaries.—What two rivers form part of the boundary between Turkey and Austria? What river and lake bound Switzerland on the north? What mountains lie on the boundary between Austria and Bavaria? *The Bohmer Wald (bö'mer wahl't*).* Between Austria and Saxony? *The Erz Gebirge (értz ga-beer'geh.).* Between Austria and Prussia? *The Riesen Gebirge (ree'zen ga-beer'geh.).*

Divisions of Austria.—In what part of Austria is Bohemia? What division of Austria is south-east of Bohemia? In what part of the empire is Galicia, or Austrian Poland? What name is given to a strip of southern Austria, bordering on Turkey? *The Military Frontier.* What divisions border on the Military Frontier? *T., B., S., C., I., and D.* In what part of the empire is Hungary? Styria? The Tyrol?

Important Places in Austria.—What is the capital of Bohemia? *P.* On what river is Prague? What is the capital of Moravia? *B.* What place is 12 miles south-east of Brunn? For what is Austerlitz celebrated? *For the great victory gained there by Napoleon over the Austrians and Russians, in 1805.* What is the chief city of Galicia? *L.*

What is the principal place in Transylvania? *Klausenburg.* In Hungary? *P.* In Slavonia? *E.* In Croatia? *Agram (og-rom').* In Illyria? *T., the chief seaport of Austria.* In Styria? *Grätz (grets), an important manufacturing and commercial city.* In the Tyrol? *Innsbruck (ins'-brook), on the Inn, the seat of a university and the center of an active trade.* What seaport south-east of Trieste? *Fiume (fe-oo'ma).* How is Schemnitz situated?

LESSON CXXXVI.

Divisions of Turkey.—What is the north-eastern part of Turkey called? What division is south-west of Wallachia? What division is south of the Balkan Mountains? In what part of Turkey are Thessaly and Albania? Bosnia and Herzegovina (*hért-seh-go-ve'nah*)? What division is east of Bosnia? Which of these divisions has the greatest proportion of Turks in its population? *R.* Where is the republic of Monte-negro (*mon-ta-na'gro*)?

Important Places in Turkey.—What places in Turkey are on the right bank of the Danube? On the left bank? What places are on the coast of the Black Sea? On what strait is Gallipoli (*gahl-lip'o-le*)? For what is it noted? *For the manufacture of morocco.* Near what river is Adrianople? How is Bosna Serni (*bos'nah ser-i'*) situated? Shumla (*shoom'-lah*)? Varna? Yassy?

* ö has almost the sound of u in fur.

Important Places in Greece.—What hamlet and plain are about 18 miles north-east of Athens? *Marathon.* For what is this spot memorable? *For the victory of Miltiades over the army of Xerxes.* What places are on the Gulf of Lepanto? What place of considerable trade is south of Corinth? *Nauplia.* For what is Navarino (*nah-vah-ré'no*) noted? *For a victory gained by the English, French, and Russian fleets over the Turks.*

Important Places in Italy.—How is Brescia (*bresh'ëä*) situated? Padua? Parma? Mod'ena? Mention some places in Italy that lie on the Adriatic. Name the chief seaport of the States of the Church. *Civita Vecchia (che'-ve-tah vek'ke-ah).* In what direction from Rome is it? What place is on the Strait of Otranto? On the Gulf of Taranto?

Important Places in Sicily and Sardinia.—What is the chief city of Sicily? What place in the north-eastern extremity of the island rivals Palermo in commercial importance? What seaport midway of the eastern coast? What is the present condition of Syracuse? *It is now a place of no importance, though once a powerful and magnificent city.* What is the capital of the island of Sardinia? How is Cagliari (*kahl'yah-re*) situated?

Important Places in Switzerland.—On what lake is Zurich situated? *On the Lake of Zurich.* On what lake is Lucerne? *On the Lake of Lucerne.* What place is on Lake Constance? Where is Lausanne (*lo-zahn'*)? For what is Lausanne noted? *For its beautiful situation.* How is Neuchâtel (*nush-ah-tel'*) situated? *On the north-western shore of the Lake of Neuchâtel.*

LESSON CXXXVII.

Islands.—What does the Grecian Archipelago include? *All the islands between the main-land of Greece and Asia Minor.* Mention some of them. Which is the largest? *N.* Mention the Ionian Isles. *Corfu (kor-foo'), Paxo, Santa Maura, Cephalonia, Zante, and Cerigo (cher'e-go).* What political division do these islands form? *A republic.*

Which of the Ionian Islands is farthest north? How is Cerigo situated? What is the capital of the Ionian Republic? *Corfu.* What group of volcanic islands lies north of Sicily? *The Lipari (lip'ä-re) Isles.* For what is Stromboli (*strom'bo-le*), an island of this group, noted? *For containing an active volcano, called "the light-house of the Mediterranean."* Where is Elba? Who resided on this island during part of 1814 and 1815?

Mountains.—What is the highest peak of the Alps? *Mt. Blanc.* To what country does Mt. Blanc now belong? *F.* What is the highest peak of the Apennines? *Mt. Corno.* In what part of Italy is Mt. Corno? What is the highest peak of the Carpathian Mountains? *Mt. Lomnitz.* Where is Mt. Lomnitz? Mount Ossa? Mt. Pelion?

Seas, Gulfs, Straits.—At what strait does Italy approach Turkey the nearest? What branch of the Mediterranean extends north-west from the Strait of Otranto? What seas and straits wash the eastern and southern shores of Turkey? What gulfs indent the coast of Turkey? Of Italy?

Lakes.—What Lake is in Hungary, south-east of Vienna? *Neusiedler (noi'seed-ler) Lake.* What is the largest lake in Hungary? *Balaton (bah'-lah-ton) Lake.* What is the largest lake in Italy? *G.* What lake is north-west of Lake Garda? *Lake Como, celebrated for its beauty and the elegant villas that cover its shores.* What lake is partly in Switzerland and partly in Italy? *Lake Maggiore (mahd-jo'ra).*

Rivers.—What is the largest river of Austria and Turkey? Of Italy? Name three rivers of Switzerland. Mention some of the rivers of southern Turkey. What river flows through the Tyrol? Through the States of the Church? Through Transylvania? What rivers rise in the north-eastern slope of the Carpathian Mountains? On what river is Lemberg?

Voyages.—Sailing from Leghorn to Trieste, through what bodies of water would you pass? From Venice to Constantinople? From Constantinople to Vienna? In what German state does the Danube rise? How many navigable tributaries does it receive? 60. How long is the Danube? 1,725 miles. How far is it navigable? *To Ulm, in Wurtemberg.*

A PART OF EUROPE N:2

Longitude 103 East of Washington 107



Scale of Miles
10 20 30 40 50 100

N O R T H

S E A

SWEDEN

D E N M A R K

IZELAND

B A L T I C S E A

RAY OF LUBEK

W I S M A R

W A R M E M U N D

R O S T O C K

D A R G I N

W I S M A R

W I S M A R

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GENERAL QUESTIONS

ON THE MAP OF A PART OF EUROPE NO. 3.

LESSON CXXXVIII.

Latitude.—Between what degrees of latitude does Holland extend? *Between about 51½° and 53¼° N. lat.* What is the latitude of the extreme northern boundary of Prussia? What parallel passes through the northern part of Luxemburg? Which is in higher latitude, Berlin or Amsterdam? Dresden or Brussels? What island in the New World is in the latitude of Bavaria? *Newfoundland.*

Longitude.—Between what degrees of longitude is Belgium situated? *Between about 2½° and 6° E. lon.* What island in the Mediterranean is in about the longitude of Saxony? About how many degrees is Dresden east of Ghent? What countries on the Map does the meridian of 10° E. lon. pass through?

The North German Confederation.—Of what does the North German Confederation consist? *Of twenty-two states, including the kingdoms of Prussia and Saxony, the duchies of Mecklenburg, Oldenburg, and Brunswick, the Saxes or Saxon duchies, and the three free cities of Bremen, Hamburg, and Lubeck.* Of what are Bremen, Hamburg, and Lubeck, respectively the capitals? *Of small republics of the same name.*

How is Saxony situated? What country bounds it on the south-east? Bound Mecklenburg. Bound Oldenburg. What river forms part of the eastern boundary of Oldenburg? How is Brunswick situated? Name the four Saxon duchies. *Saxe Meiningen (sax mi'ning-en), Saxe Coburg-Gotha (go'ta), Saxe Weimar (wi'mar), and Saxe Altenburg (ahl'ten-burg).* North and west of what kingdoms do these duchies lie?

What German states were incorporated in Prussia after the war of 1866? *The kingdom of Hanover, the electorate of Hesse (hess) Cassel, the duchy of Nassau, the free city of Frankfurt on the Main, and the landgraviate of Hesse Homburg.* What duchies before included in Denmark were annexed to Prussia? *Sleswick and Holstein (hol'stine).* What has been the consequence of these annexations? *Prussia has become one of the most powerful countries of Europe.*

The South German States.—Name the South German states. *The kingdoms of Wurtemberg and Bavaria, the duchy of Baden (bah'den), part of the grand duchy of Hesse Darmstadt (darm'stadt) south of the Main, and the principality of Liechtenstein (leek'ten-stine).* Which of these is the largest? *Bavaria.* Which is the smallest? *L.*

Bound Bavaria. What name is given to that part of Bavaria which lies west of the Rhine? Bound Wurtemberg. Bound Baden. What separates the two parts of Hesse Darmstadt? *A strip of territory belonging to Prussia.* To what does the northern part of Hesse Darmstadt belong? *To the N. German Confederation.* How is Liechtenstein situated? *On the east bank of the Rhine, a few miles south of Lake Constance.*

LESSON CXXXIX.

Capitals.—What is the capital of the grand duchy of Luxemburg? How is it situated? What is the capital of Oldenburg? Of Mecklenburg Schwerin (*shwa-reen'*)? Of Mecklenburg Strelitz? *Neu Strelitz (noi stra'lit).* Of Brunswick? Of Saxony? Of Saxe Meiningen? Of Saxe Coburg-Gotha? Of Saxe Weimar? Of Saxe Altenburg? Of Hesse Darmstadt? Of Bavaria? Of Wurtemberg? Of Baden? *Carlsruhe (karls'roo).*

Important Places in Belgium.—How is Ghent situated? What seaport has Belgium? On what water is it? What flourishing commercial city is on the railroad between Ghent and Ostend? *Bruges (bru'jiz).* What place is nine miles south of Brussels? For what is Waterloo famous? How is Charleroi (*shar-leh-rwah'*) situated? Mechlin (*mek'lin*)? Liege? Na'mur?

Important Places in Holland.—What is the chief literary city of Holland? *Leyden, noted for its university.* How is Leyden situated? What place is on the same river, a little higher up? *U., actively engaged in trade and manufactures.* How is Haarlem (*har'lem*) situated? With what places does it communicate by railroad? Where is Zutphen?

Important Places in Prussia.—What places in Prussia are on the Rhine? For what is Coblenz remarkable? *For being the most strongly fortified place in Prussia.* What place on the western frontier is connected with Cologne by railroad? *Aix-la-Chapelle (akes-lah-shah-pel'), noted for its mineral waters.* What city in the south, on the Moselle? *Treves, the oldest city of Germany.*

For what is Dusseldorf famous? *For its school of painting.* How is it situated? Where is Hanover? What place is on the Havel, south-west of Berlin? For what is Potsdam noted? *For the palace of Sans-Souci, a favorite residence of the King of Prussia.* What places are on the Oder?

Important Places in Saxony.—What city of Saxony is the chief seat of the porcelain manufacture? *M.* How is Meissen (*mice'sen*) situated? From what does Freiberg derive its importance? *From being the center of a rich mining district.* How is Chemnitz (*kem'nitz*) situated? For what is it noted? *For its cotton manufactures.*

Important Places in Bavaria.—What places in Bavaria are on the Danube? Of these, which is nearest to Austria? For what is Ratisbon celebrated? *For having been the seat of the German Diet.* What place, one of the most ancient cities of Germany, is in the north-western part of Bavaria, on the Main? What is the principal city of Rhenish Bavaria? *S.*

LESSON CXL.

Important Places in Wurtemberg and Baden.—What city in Wurtemberg is at the head of navigation on the Danube? *U.* For what is Ulm memorable? *For the surrender of nearly 30,000 Austrian troops to Napoleon, in 1805.* How is Heilbronn situated? Where is Baden-baden? For what is it celebrated? *For being the most beautiful and popular watering-place of Germany.* Which is the most important commercial town of Baden? *Mannheim (mahn'hime).* How is Heidelberg situated? For what is it noted? *For its university.*

Islands and Mountains.—What island lies at the entrance to the Zuider Zee? What island lies in the North Sea, north-west of the mouth of the Elbe? To what country does Heligoland belong? What two islands lie off the western coast of Sleswick? Where are the Hartz Mountains? What mountains separate Bavaria from Bohemia? Saxony from Bohemia? Is the section represented in the Map mostly mountainous or level?

Rivers.—What tributaries has the Scheldt? Name some of the branches of the Elbe. What great river rises in Baden? What river forms the western boundary of Baden? What is the principal river that crosses Saxony? Describe the Spree. The Havel.

How long is the Rhine? *960 miles.* How far is it navigable? *For vessels of 200 tons, to Mentz; for smaller vessels, to Schaffhausen (shahf-hou'zen).* What is the length of the Weser? *250 miles.* Of the Elbe? *550 miles.* How far is the Elbe navigable? *To the mouth of the Moldau, in Bohemia.* How long is the Oder? *550 miles.* How far is it navigable? *For vessels of 50 tons, to Breslau.*

Voyages, etc.—On what waters would one sail in making a voyage from Cologne to Bremen? From Bremen to Hamburg? From Lubeck to Frankfurt on the Oder? From Rotterdam to Antwerp? Name some of the rivers that have railroads running along their banks. With what Prussian port is Berlin connected by railroad? With what free city? With what places in Saxony?

General Questions.—How is Cuxha'ven situated? To what republic does it belong? How is Mentz situated? Between what waters does Sleswick lie? Holstein? What bays on the Map are tributaries of the Baltic? Where is the Dollart? With what water is this gulf connected? Where is Lake Muritz? The Black Forest?

STUDIES ON THE MAP OF ASIA,

SYSTEMATICALLY ARRANGED.

LESSON CXLII.

Countries.—Bound each :—Siberia,—the Chinese Empire, Mongolia, Mantchoo'ria, Core'a, China, Thibet (*ti'et*),—India, Anam (*a-nam'*), Siam, Birmah, Hindostan,—Beloochistan (*bel-oo-chis-tahn'*), Arabia, Turkey, Georgia, Persia, Turkestan (*toor-kes-tahn'*), and Afghanistan (*ahf-gahn-is-tahn'*).

Capital Cities.—State the situation of each :—Irkutsk (*ir-kootsk'*), Tobolsk', Pekin', Kingkitao (*king-ke-tah'o*), Lassa, Hué (*hoo-a'*), Bangkok, Mandelay, Calcutta, Kelat (*ke-tah't'*), Mecca, Constantinople, Tiflis, Teheran (*teh-her-ahn'*), Bokhara (*bo-kah'rah*), Khiva (*ke-vah*), Herat (*her-ah't'*), Cabul (*kah-bool'*), and Candahar'.

Important Places in Siberia and the Chinese Empire.—State the situation of each :—Okhotsk (*o-kotsk'*), Marinsk', Nertchinsk', Barnaul (*bar-nóul*), Khokan (*ko-kahn'*), Ekaterinburg (*a-kah'ter-eeen-boorg'*), Omsk, Tomsk, and Yakutsk (*yah-kootsk'*).

Ourga (*oor'gah*), Yarkand (*yah-kahnd'*), Kashgar,—Sagalin-oola (*sah-gah-teen'oo'lah*), Ching-yang, Kir'in-oo'la,—Tientsin (*te-en-teen'*), Nankin', Shang-hai, Hangchow (*hang-chóu*), Ningpo, Foochow (*foo-chóu*), Amoy (*ah-moi'*), Changchow (*chang-chóu*), Canton', Singan (*seen-gahn'*), Nanchang',—and Tesboo Lomboo.

LESSON CXLIII.

Important Places in India.—State the situation of each :—Keeb'o, Saigon (*si-gon'*),—Pataui (*pah-tah'ne*), Singapore', Malacca, Penang',—Mergui (*mer-ghe'*), Rangoon,—and Ava (*ah'vah*).

Cashmere, Lahore, Delhi (*del'le*), Lucknow, Patna, Cuttack, Madras', Co'chin, Goa, Bombay, Surat (*soo-rah't'*), Baro'da, Hyderabad (*hi-drah-bahd'*), Agrah (*ah'grah*), Benares (*ben-ah'rez*), Napoor, and Hyderabad (*hi-drah-bahd'*).

In Beloochistan, Arabia, and Turkey.—State the situation of each :—Gundava (*gun-dah'vah*),—Muscat, Makullah, A'den, Mo'cha, Sana (*sah-nah'*), Jidda, Medina (*me-de'nah*), Er Riad (*re-ahd'*),—Trebizond (*treb'e-zond*), Erzeroum', Diarbekir (*de-ar-be-keer'*), Bagdad, Basra (*bahs'rah*), Jerusalem, Damascus, Aleppo, Smyrna, and Bru'sa.

In Persia, Turkestan, and Afghanistan.—State the situation of each :—Tabriz (*tah-breez'*), Balfrush (*bahlt-froosh'*),

Mesh'ed, Kerman, Bushire (*boo-sheer'*), Shiraz (*she-rahz'*), Ispahan (*is-pá-hahn'*),—Samarcand (*sah-mar-kahnd'*), Balkh,—and Ghiz'nee.

Islands.—Describe each :—Nova Zembla, New Siberia, St. Lawrence, Kurile (*koo'ril*), Saghalien (*sah-gah-le'em*),—Jesso, Nippon (*ne-phon'*), Sikokf (*se-kokf'*), Kinsin (*ke-oo'-se-oo'*),—Loo Choo, Formo'sa, Hong Kong, Hainan (*hi-nahn'*), Phil'ippine, Nicobar, Andaman', Ceylon, Maldivé, Laccadive, Soc'otra, and Cyprus.

LESSON CXLIII.

Capital Cities on the Islands.—Describe each :—Jedo (*yed'o*), Manila (*mah-ne'tah*), and Colombo.

Important Places on the Islands.—Describe each :—Hakodadi (*hah-ko-dah'de*),—Yokohama (*yo-ko-kah'mah*), Simodadi (*se-mo'dah*), Hioga (*he-o'gah*), Miako (*me ah'ko*), Niogata (*ne-a-gah'tah*),—Nagasaki (*nah-gah-sah'ke*),—and Taiwan (*ti-wahn'*).

Peninsulas.—Describe each :—Kamtchatka, Corea, the Malay Peninsula, Hindostan, and Arabia.

Isthmuses.—Describe each :—Kraw and Suez.

Capes.—Describe each :—Vostochnoi (*vos-tok'noi*), Svato'i, East, Lopatka, Cambodia, Romania (*ro-má'ne-á*), Com'orin, and Ras al Gat.

Mountains.—Describe each :—Altai (*ahl-ti'*), Yablonoi (*yah-blo-noi'*), Khin-ghan (*kin-gahn'*), Peling (*pa-ling'*), Meling (*ma-ling'*), Himalá'ya, Eastern Ghauts, Western Ghauts, Taurus, Caucasus, Hindoo Koosh, Kuen Lun (*kuen loon*), and Thian Shan (*te-ahn'shahn*).

Seas.—Describe each :—Kara (*kah'rah*), Behring, Kamtchatka, Okhotsk, Japan, Yellow, Blue, China, Arabian, Red, Marmora, Black, Caspian, and Ar'al.

LESSON CXLIV.

Gulfs and Bays.—Describe each :—O'be, Le'na, Anadir (*ah-nah-deer'*), Pechelee (*pa-che-le'*), Tonquin (*ton-keen'*), Siam, Martaban', Bengal (*ben-gawl'*), Manaar (*mah-nahr'*), Cambay', Persian, and Aden.

Straits and Channels.—Describe each :—Behring, Corea, Malacca, Ormus, Bab-el-Mandeb,—La Perouse (*lah pa-rooz'*), and Matsmai (*mats-mi'*),—Channel of Tartary, and Formosa.

Lakes.—Describe each :—Baikal (*bi'kahlt*), Zaizan (*zi-zahn'*), Telhany (*chah'ne*), Balkash (*bahlt-kash'*),—Ko'ko Nor, Lop Nor, Bosteng Nor,—and Zar'rub.

Rivers.—Describe each :—Obe, Irtish, Ish'in, Tobol', Yenisei (*yen-e-sa'e*), Angara (*ahn-gah-rah'*), Middle Tougouska, Oleneck (*o-la-nek'*), Lena, Aldan (*ahl-dahn'*), Indighir'ka, and Kolima (*ko-le-mah'*).

Anadir, Amoor (*ah-moor'*), Songari (*son-gah-re'*), Hong-Ilo, Yang-tse-kiang (*yahng-tse-ke-ahng'*), Choo-Kiang, Tonquin, Cambodia, Meinam (*ma-nahm'*), Irrawad'y, Brahmapoo'tra, Ganges, Hoogly, and Jum'na.

Godavery (*go-dah'ver-e*), Krishna, Nerbnd'dah, Indus, Chenaub', Ravee (*rah've*), Sutlege, Duslee, Euphra'tes, Ti'gris, Attruck, Amoo', Sihon (*se-ton'*), Ili (*e'le*), Yarkand, Kashgar, and Helmund.

QUESTIONS ON THE MAP OF ASIA,

PROMISCUOUSLY ARRANGED.

LESSON CXLV.

I. How is Asia bounded? What cape in Asia extends farthest north? What island in the Western Hemisphere extends still farther north? *Greenland.* What cape is at the southernmost extremity of Asia? *R.* What countries in North America are in about the same latitude as Arabia? *M. and C. A.*

II. What three seas form part of the boundary between Asia and Europe? What mountain range and river separate Siberia in part from the Chinese Empire? What range separates Thibet from Hindostan? What strait and gulf lie between Persia and Arabia? What city is the chief seaport of Turkey? *S.*

III. On what waters would you sail in going from Calcutta to Canton? From Canton to Bombay? In what direction is Delhi from Bombay? Madras from Delhi? On what coast is Madras? What coast of Hindostan borders on the Arabian Sea? Mention the chief seaports of China.

IV. What empire lies east of Corea? *J.* On what island is the capital city situated? Of the cities of Asia, which is on the Angara? On the Obe? On the Tigris? Of those in British India, which are on the Jumna? On the Ganges? On the Irrawaddy? On the Indus? Mention the principal divisions of British India. (*See Small Map.*) What places are connected with Calcutta by railroad?

V. What islands are north of Siberia? What island lies opposite the mouth of the Amoor? What group of islands is north-east of Formosa? South of Formosa? What island is east of Anam? What group of islands is east of Ceylon? What, west of Ceylon? What, west of the Malabar coast? What rivers flow into the Sea of Aral? Into the Bay of Bengal? Into the Persian Gulf?

VI. What seas indent the shores of the Chinese Empire? What large desert is in this empire? What desert is in Arabia? What island of Asia is about the size of the Middle States? *Nippon.* Through what countries of Asia does the Tropic of Cancer pass? What is the largest country of Asia? *S.* The smallest? *G.* The longest river? *Yang-tse-kiang.* The largest city? *Pekin.*



ASIA

Scale of Miles
100 200 300 400 500

Longitude East from Greenwich
10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170



BRITISH INDIA

Showing the
PRINCIPAL DIVISIONS
AND RAILWAYS



ANIMALS AND PLANTS OF ASIA AND AUSTRALIA.

- | | | |
|------------------------|------------------------|---------------------------|
| 1. Striped hyena. | 8. Indian rhinoceros. | 15. Ornithorhynchus. |
| 2. Leopard. | 9. Bornean sun-bear. | 16. Australian porcupine. |
| 3. Tiger. | 10. Wombat. | 17. Rorqual. |
| 4. Zebu, or Indian ox. | 11. Syrian wild asses. | 18. Sea-bear. |
| 5. Cobra. | 12. Yak. | 19. Sea-elephant. |
| 6. Peacock. | 13. Tasmanian wolf. | 20. Sea-lion. |
| 7. Indian elephant. | 14. Kangaroo. | |
| a. Japanese lily. | f. Cocoa-nut palm. | k. Siberian pines. |
| b. New Zealand panax. | g. Wine-palm. | l. Australian tree-ferns. |
| c. Jungle. | h. Banyan. | m. Cedars of Lebanon. |
| d. Screw-pine. | i. Deodorus cedar. | n. Norfolk Island pine. |
| e. Bamboo. | j. Cabbage palms. | o. New Zealand cypress. |

LESSON CXLVI.

ASIA.

Geographical Position, etc.—Asia occupies the eastern portion of the Eastern Continent. Its length, from Behring Strait to Bab-el-Mandeb, is about 6,700 miles; and its breadth, from the south-eastern extremity of China Proper to the Ural Mountains, is about 3,800 miles.

Physical Features.—The northern and north-western parts consist of vast plains; the central part is an elevated table-land. The mountain chains run mostly east and west. The river systems of Asia surpass those of any other portion of the Eastern Continent.

Inhabitants.—The inhabitants belong to three distinct races,—the Caucasian, the Mongolian, and the Malay. The Hindoos, Arabs, and Persians, are branches of the Caucasian race; the Chinese and Tartars, of the Mongolian.

Political Divisions.—The chief political divisions of Asia are Siberia, the Chinese Empire, India (including Anam, Siam, Birmah, and Hindostan), Beloochistan, Arabia, Turkey, Georgia, Persia, Turkestan, Afghanistan, and the Empire of Japan.

SIBERIA.

Geographical Position, etc.—This immense territory, belonging to European Russia, occupies the entire northern part of the Asiatic Continent. It is a vast plain, sloping northward toward the Arctic Ocean.

Soil, etc.—The soil is sterile, and the climate intensely severe. Metals (chiefly gold, iron, and silver) and furs are the principal products.

Traveling Facilities.—These are very few. The rivers furnish the chief means of transport.

Inhabitants, etc.—The inhabitants consist of various tribes of Mongol descent, and of exiles from European Russia, banished for political or other offences. The latter are under the charge of a military force, and occupy the country near the Ural Mountains. Mining and hunting form the chief pursuits. The religion of the native tribes is Paganism; that of the Russian settlers, the Greek Church.

Manufactures and Exports.—At Irkutsk there is an imperial factory of woollens for the clothing of the troops; and, in some of the mining districts, there are imperial founderies. Tobolsk has some tanneries and manufactories of soap. The exports are furs, leather, and metals.

Important Places.—IRKUTSK, the provincial capital of eastern Siberia, on the right bank of the Angara, is the handsomest town in the territory, and the center of such refinement as Siberia possesses. TONOLSK, on the Irtysh, is the provincial capital and chief emporium of western Siberia.

THE CHINESE EMPIRE.

Geographical Position, etc.—The Chinese Empire lies south of Siberia. It embraces an area of five millions of square miles, in which are included Mongolia, Mantchooria, Corea, China Proper, and Thibet.

MONGOLIA AND MANTCHOORIA, taken together, are frequently called Chinese Tartary. They are for the most part made up of elevated plains, bounded by mountain ranges. A great part of Mongolia is sterile, forming the Desert of Gobi, about 1,200 miles long and over 500 miles wide.

The Mongolians live in tents, which, as the pastures fail, they remove ten or fifteen times a year, going north in spring and south in autumn. Their flocks consist of horses, camels, black cattle, sheep, and goats.

In the south-western part of Mongolia, sometimes called Chinese Turkestan, considerable trade is carried on by means of caravans.

COREA is only nominally a part of the Chinese Empire. Its king, who has absolute authority over his own subjects, is obliged to pay an annual tribute to the emperor of China. The prevailing religion is Buddhism. **KINGKITAO** is the capital.

CHINA PROPER.



FLAG OF CHINA.

Geographical Position.—China Proper forms the south-eastern part of the Chinese Empire.

Physical Features.—Most of the country consists of a succession of river-valleys, divided by ranges of high land. In the north-east is an extensive and fertile plain.

Soil, etc.—The soil is fertile and highly cultivated; the climate is cold

in the north, but mild in the south. The tea-plant is the most noted of the native productions. Rice is the staple grain. Sugar-cane, cotton, hemp, tobacco, rhubarb, indigo, the varnish-tree, the camphor-tree, the tallow-tree, and cinnamon, are among the most common trees and shrubs. Olives, oranges, pine-apples, etc., are abundant. The mulberry is extensively reared for the support of the silk-worm.

Inhabitants, etc.—The Chinese are of Mongolian origin. Their religion is Buddhism, a species of Paganism held by more than one-third of the human race. Agriculture and manufactures form the leading pursuits. Trade, both inland and maritime, is extensive.

Traveling Facilities.—The roads are narrow. Traveling and traffic are carried on chiefly by means of rivers and canals. The Imperial Canal runs through the eastern part of China, for a distance of about 700 miles.

Manufactures and Exports.—The Chinese have great skill in the manufacture of silks, cotton goods, earthenware, artificial flowers, and papers of fine tissue, in the carving of ivory, tortoise-shell, and mother-of-pearl, and in the arts of embroidery and dyeing. Silk and nankeen fabrics, porcelain, lacquered wares, ivory articles, and immense quantities of tea, are exported.

Important Places.—**PEKIN**, the capital of the empire, lies in a sandy plain, about 60 miles south of the Great Wall of China, and 100 miles from the sea.

NANKIN, on the right bank of the Yang-tse-kiang, is one of the principal seats of the silk, paper, and cotton manufactures of China. **SHANGHAI**, **NINGPO**, **FOOCHOW**, **AMOY**, and **CANTON**, are free commercial ports. Canton, on the Canton River, about 70 miles from its mouth, and Shanghai, on the Woosung River, 14 miles from the sea, are the chief commercial emporiums.

THIBET, a region of central Asia included in the Chinese Empire, and situated west of China Proper, is but imperfectly known. The climate is cold. The people are engaged mainly in rearing sheep and goats. The fine hair of the latter, which is used in making Cashmere shawls, is largely exported.

LASSA, the capital, is distinguished for being the residence of the Grand Lama, and is usually crowded with noble personages from various parts of Asia, who come to offer him costly presents.

LESSON CXLVII.

INDIA.

India comprises two large peninsulas in southern Asia; Indo-China (called also India beyond the Ganges and Farther India) and Hindostan.

INDO-CHINA, OR INDIA BEYOND THE GANGES.

Geographical Position and Divisions.—Indo-China, the more easterly of the two great peninsulas of India, is divided chiefly into three states; viz., the Kingdom of Siam and the Empires of Anam and Birmah. Besides these, there are some small states in the Malay Peninsula, and the Provinces of Tenasserim, Pegu, and Aracan. These provinces belong to Great Britain.

Physical Features.—The peninsula is diversified by long river-valleys, and a succession of mountain-chains.

Soil, etc.—The soil is fertile; the climate is hot and moist, but generally healthy. Forests are numerous and yield much valuable timber, among which are many woods used as dyes and perfumes. Rice is the chief crop; cotton, indigo, tobacco, and the sugar-cane, are extensively raised. Marble, amber, also sapphires and other gems, are found in various parts.

Inhabitants, etc.—The inhabitants, except those of the Malay Peninsula, resemble the Hindoos and Chinese. Their religion is Buddhism. Agriculture is pursued, though in a very imperfect manner. Here, as indeed throughout Asia, much of the labor is performed by women. The houses are generally constructed of bamboo and matting, covered with thatch, and resting several feet above the ground on a foundation of piles. There are few if any roads; the rivers afford the chief means of communication.

Manufactures and Exports.—A few silk and cotton goods are woven. Dyeing is practised to some extent. The people of Birmah excel in gilding and the casting of bells. Among the leading exports are timber, embracing a variety of ornamental woods, raw silk, cotton, ivory, gums, cardamom-seeds, and edible birds' nests.*

Important Places.—**HUE**, the capital of the Empire of Anam, situated about ten miles from the China Sea, is noted for its fortress, which is considered the strongest in Asia. **BANGKOK**, the capital of Siam, on the Meikong, is a large city, and the chief trading port of the kingdom.

MANDELAY, the capital of Birmah, lies on the Irrawaddy, about six miles north of Ava. **RANGOON**, on the Irrawaddy, is the chief commercial city of the Birman Empire. **MAULMAIN** (*maw-l-mine'*) is the chief town of the Tenasserim Provinces. **SINGAPORE**, on an island of the same name at the extremity of the Malay Peninsula, belongs to Great Britain. It is one of the principal commercial emporiums of the East.

HINDOSTAN.

Geographical Position, etc.—Hindostan embraces the more westerly of the two peninsulas of India. Its area nearly equals one-third that of all Europe.

Divisions.—The chief divisions of Hindostan are the British Territories, the Protected States, and the Independent States.

THE BRITISH TERRITORIES are controlled by a Governor-General, who is subject to the sovereign of Great Britain. They comprise the Presidencies of Bengal in the north, Madras in the south-eastern, and Bombay in the south-western, part of the peninsula. (*See Small Map of British India.*)

THE PROTECTED STATES, situated mainly in the central part of Hindostan, retain their own forms of government, though they are under the protection or control of the British.

THE INDEPENDENT STATES are Nepal and Bootan (*boo-tahn'*), which lie along the southern slope of the Himalaya Mountains.

Physical Features.—The northern part is a vast plain; the central and southern portions consist of lofty plateaus bordered by mountains. The Malabar coast is high and bold; the Coromandel coast is low and sandy.

* Nests of a species of swallow, eaten by the Chinese.

Soil, etc.—There are some barren tracts in the interior table-lands, that are deficient in water; but the valleys of the Ganges and the Indus are exceedingly fertile. In the central and southern parts, the heat is very great, and the year is divided into two seasons—the wet and the dry. The woods and jungles abound in ferocious animals, birds, and insects.

The vegetable and mineral productions of India are rich and varied. Cocoa-nuts, pomegranates, citrons, dates, tamarinds, pine-apples, bananas, and many other tropical fruits, grow in great profusion. Indigo and opium are extensively cultivated. Diamonds and other precious stones are found.

One of the most remarkable productions is the banyan, or Indian fig-tree, whose branches extend to the earth, take root, and form new trunks. A banyan-tree has been known to have more than 3,000 trunks, and to cover seven acres of ground.

Inhabitants, etc.—About six-sevenths of the inhabitants are included under the general name of Hindoos; the remainder consist of various foreigners settled in India. Among the native tribes, Brahminism and Mohammedanism prevail. Agriculture, unskillfully conducted, forms the leading pursuit. Carpets, shawls, and silk fabrics, are extensively manufactured.

Traveling Facilities.—The roads are mere tracks; stages are almost wholly unknown. Steamers have been introduced on some of the rivers. A railroad connects Calcutta with Delhi. Madras and Surat are also termini of important railroads.

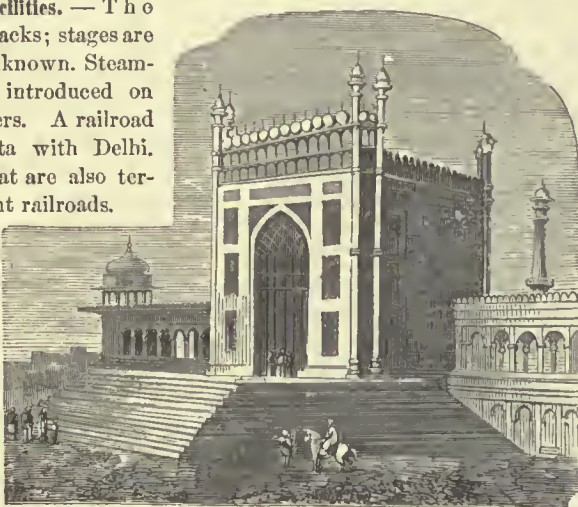
Manufactures

and Exports.

Among the manufactures, cotton and silk fabrics and Cashmere shawls are the most important. The leading exports are indigo, opium, cotton, wool, silk, drugs, perfumes, and precious stones. The commerce of India is considerable.

Important Places.—CALCUTTA, the capital of the Bengal Presidency and of British India, on the Hoogly, is the seat of an immense trade. The English live in one quarter of the city, and the natives in another. BENARES, the holy city of the Hindoos, on the Ganges, is a noted place of resort for pilgrims from all parts of India, and is celebrated for its trade in diamonds.

MADRAS, the capital of the Madras Presidency, is the chief commercial city on the eastern coast. BOMBAY, the capital of the presidency of the same name, on Bombay Island, carries on a trade second only to that of Calcutta. PONDICHERRY, 80 miles farther south, is the capital of the French possessions in India. GOA, on the Malabar coast, is the capital of the Portuguese possessions.



MOSQUE OF JUMNA, DELHI.

LESSON CXLVIII.

BELOOCHISTAN.

Geographical Position.—Beloochistan is situated in southern Asia, south of Afghanistan, between Persia and Hindostan.

Physical Features.—The surface is rugged and elevated.

Soil, etc.—The soil is deficient in water and barren; the climate among the mountains is cool, but in the plains and deserts, hot. In the plains of the north-east, rice, sugar-cane, cotton, tobacco, and indigo, are raised. The camel is the chief beast of burden.

Inhabitants, etc.—The inhabitants consist chiefly of Beloochees and Brahooees. They dwell principally in rude tents, made of goats' or camels' hair. Their religion is Mohammedanism. Agriculture is but little attended to. Trade is carried on mainly by means of caravans.

Important Places.—KELAT, the capital, stands on an elevated plateau about 6,000 feet above the level of the sea. The Khan of Kelat is the principal native ruler, but many of the tribes are independent of his control. GUNDAVA is the usual winter residence of the Khan.

ARABIA.

Geographical Position.—Arabia is a peninsula in south-western Asia.

Physical Features.—The coasts are low; the interior forms a series of high plateaus, mostly desert. There are no rivers or forests.

Soil, etc.—In some of the valleys, the soil is fertile. The climate is generally hot, and the driest in the world. Among the useful plants, coffee holds the first place; olives, almonds, filberts, dates, tamarinds, and various gums and drugs, are produced in abundance. The Arabs raise a sort of millet, which forms their chief food; the other grains, except oats, are also cultivated. The Arabian horse and camel are much esteemed.

Inhabitants, etc.—The Arabs are divided into two classes, the dwellers in the towns, and the Bedouins (*bed'oo-eens*), or inhabitants of the desert, who live in tents and lead a wandering life. Both are Mohammedans. Arabia is not subject to one sovereign; the people are divided into numerous independent tribes, each governed by its own sheik or chief. The leading occupation is the raising of camels, horses, goats, sheep, etc.

Traveling Facilities.—Travelers who wish to cross the deserts join in caravans, and pay tribute to the various tribes through whose territory they pass, that they may not be attacked on the route. A single caravan is sometimes composed of hundreds of men and camels.

Manufactures and Exports.—Manufactures are almost wholly unknown, except as a domestic pursuit for the women. The exports are coffee, dates, gum-arabic, myrrh, aloes, and various drugs.

Important Places.—MECCA is celebrated as the birth-place of Mohammed, and is supported by the pilgrims who resort to it in caravans from every part of the Mohammedan world. MUSCAT is the largest city, and the chief emporium of trade between Arabia, Persia, and India. MEDINA is noted for having been the burial-place of Mohammed. ADEN, on the southern coast, belongs to the British, and is used as a depot for coal, which is sent there in immense quantities for the India steamers.

TURKEY IN ASIA.

Geographical Position, etc.—Turkey in Asia lies north of Arabia; with Turkey in Europe, it constitutes the Turkish or Ottoman Empire.

Divisions.—The chief divisions of Asiatic Turkey are, 1. Asia Minor, or Anatolia, in the north-western part; 2. Armenia, in the north-eastern part; 3. Syria, in the southern part, between the Euphrates and the Mediterranean. The southern part of Syria is called Palestine, or the Holy Land.

Physical Features.—The surface of Asia Minor is mountainous, with high table-land in the interior, and rich plains on the coast. In Armenia, there is a succession of high mountain-chains and elevated valleys; in Syria, the western part is mountainous, and the eastern an elevated plain.

Soil, etc.—The soil is generally very fertile; the climate is cold and damp in the mountainous regions, but warm and delightful in the valleys. Grain, cotton, coffee, tobacco, and delicious fruits, are abundantly produced. The date-palm furnishes an important article of food.

Inhabitants, etc.—The population is of a mixed character, embracing Turks, Greeks, Syrians, Jews, Arabs, Armenians, etc. Mohammedanism is the prevailing religion. Agriculture receives but little attention. In Asia Minor, considerable care is bestowed upon the rearing of live-stock.

Traveling Facilities.—These are limited; there are few regular roads.

Manufactures and Exports.—Manufactures are not extensive. Among them are caps of silk and gold thread,—silk sashes and cords,—silk-gauze shirts, veils, and cloaks,—slippers, tassels, turbans, divan covers, etc. The exports are raw silk, cotton, goats' hair, raisins and other dried fruits, dye-woods, drugs, and some articles of native manufacture.

Important Places.—SMYRNA, a noted seaport of Asia Minor, is the chief emporium of western Asia. It presents a fine appearance from the sea, but its houses are only one story high, and its streets are narrow and dirty. TREBIZOND is a fortified port on the Black Sea, largely engaged in trade. BAGDAD, on the Tigris, is noted for its manufactures of red and yellow leather. DAMASCUS, situated in a fertile plain in Syria, is surrounded by a dilapidated wall. JERUSALEM, a city of Palestine, is interesting chiefly from having been the scene of the most important events narrated in Scripture history.

GEORGIA.

Geographical Position, etc.—This country lies south of the Caucasus Mountains. It is under the government of Russia.

Physical Features, etc.—The surface is hilly; much of it is covered with forests. The soil is fertile. The chief productions are wheat, maize, flax, and hemp.

Inhabitants, etc.—The population is composed of Georgians, Armenians, Jews, and Turks. The prevailing religion is that of the Greek Church. Agriculture and the rearing of cattle are the chief sources of support. The Georgians are a handsome race; the women are noted for their beauty.

TIFLIS, the capital, an important seat of trade, is noted for its hot baths.

LESSON CXLIX.

PERSIA.

Geographical Position.—Persia lies between Asiatic Turkey and Afghanistan.

Physical Features.—The interior of Persia is an elevated plateau, a large portion of which is desert. Water is scarce.

Soil, etc.—The soil of the table-lands is barren, but that of the valleys is very fertile. In the north, the climate is cool; in the south, the heats of summer are almost insupportable. Hemp, silk, cotton, tobacco, rice, corn, and various fruits, drugs, and gums, are produced. In the north-eastern part are some mines of turquois (*tur-keez'*),—a gem peculiar to Persia.

Inhabitants, etc.—The Parsees, descendants of the ancient Persians, are few in number. Turks, Tartars, Armenians, Arabs, etc., compose the bulk of the population. Jews are numerous in all the towns. The prevailing religion is Mohammedanism. Manufactures and commerce are the chief pursuits.

Traveling Facilities.—The roads are mere mule-tracks; land commerce is carried on chiefly by means of caravans.

Manufactures and Exports.—Silk fabrics, shawls of goats' hair, and leather, form the most important articles of manufacture. Among the exports are dates and other dried fruits, asafoetida, opium, saffron, pearls, turquois, and various articles of native manufacture.

Important Places.—TEHERAN, the capital, lies on an elevated plain, 70 miles south of the Caspian Sea. ISPAHAN, situated in a fine plain, contains the best artisans in Persia, and is the seat of an important inland trade. BUSHIRE, on the Persian Gulf, is the chief seaport.

TURKESTAN.

Geographical Position, etc.—Turkestan lies west of the Chinese Empire. It is divided into several independent states, in each of which the ruler is styled Khan. The principal Khanats are Khokan in the east, Bokhara in the south, and Khiva in the center.

Physical Features.—The greater part of Turkestan is an immense plain, with a gradual slope toward the Sea of Aral.

Soil, etc.—The soil in some of the valleys is fertile; the climate is subject to great extremes. Cotton, silk, wool, corn, and fruits, are among the chief productions. In the south-eastern part are mines of rubies, and a blue stone called *lapis lazuli*.

Inhabitants, etc.—The inhabitants are chiefly of Tartar origin. Some of the tribes attend to the raising of flocks and hunting, others to agriculture. Mohammedanism prevails.

Manufactures and Exports.—There are few manufactures; some silk and cotton stuffs are made in the towns, also sabers, knives, and other weapons. The chief exports are hides, horses, furs, and wool.

Important Places.—KHOKAN, the capital of the khanat of Khokan, lies on the south side of the Sihon River. BOKHARA, the capital of the khanat of the same name, is the most celebrated seat of learning in Asia.

AFGHANISTAN.

Geographical Position, etc.—Afghanistan, a country of central Asia, lies south of Turkestan. Most of the surface consists of rocks and mountains.

Soil, etc.—The soil and climate much resemble those of Turkestan. Tobacco is extensively raised, and madder is also an important product. Sheep and goats are abundant, producing a fine wool used in the manufacture of shawls. Agriculture is in a rude state.

Inhabitants, etc.—The inhabitants consist of Afghans proper, and numerous other races. The religion is Mohammedan.

Manufactures and Exports.—The manufactures are confined chiefly to cotton and woolen stuffs, fire-arms, and saddlery. Horses are reared in great numbers, and exported to India. The transit trade is carried on by means of camels and horses.

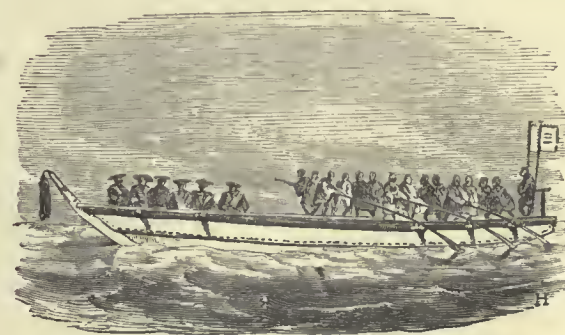
Important Places.—CANUL, the capital, is famous in the East for the vegetables and fruits with which its markets abound. HERAT is the chief emporium of the trade between Persia and Hindostan.

THE EMPIRE OF JAPAN.

Geographical Position.—The Empire of Japan consists of several islands situated east of the Chinese Empire.

Soil, etc.—Their interior has not been explored by Europeans. The soil is said to be sterile, but carefully cultivated. The climate is subject to great extremes of heat and cold. The islands are rich in minerals.

Inhabitants, etc.—The Japanese resemble the Chinese, and belong to the Mongolian race. Their religion is Paganism. They are noted for their works in iron, copper, and steel, and their skill in the art of japanning. Agriculture is carried to a high degree of perfection.



JAPANESE BOAT.

The Japanese, previous to 1854, had no dealings with any foreigners except the Chinese and Dutch, and even to these nations opened but one of their ports, Nagasaki. They have now opened two ports, HAKODADI, on the island of Jesso, and SIMODA, on Nippon, for the accommodation of foreign vessels.

Important Places.—JEDO, the capital, a large and densely populated city on the Island of Nippon, is the residence of the military emperor. MIACO, in the southern part of the same island, is the chief seat of learning, the principal manufacturing city, and the residence of the spiritual sovereign.

STUDIES ON THE MAP OF AFRICA,

SYSTEMATICALLY ARRANGED.

LESSON CL.

Countries.—Bound each :—Morocco, Algeria, Tunis, Tripoli, Barca, Egypt, Nubia, Abyssinia, Country of the Somalies, Zanguebar (*zahn-ga-bar*'), Mozambique (*mo-zam-beek*'), the Zoolu Country, Natal (*nah-tahl*'), Caffraria, Cape Colony, Country of the Hottentots, and Country of the Cimbebas (*sim-ba'baz*) and Damaras (*da-mah'raz*).

Guinea, Liberia, Sierra Leone (*se-er'rah le-o'ne*), Senegambia, Sahara (*sah-hah'rah*), Fezzan (*fez-zahn*'), Soudan (*soo-dahn*'), Kordofan (*kor-do-fahn*'), Ethiopia, Country of the Bechuanas (*bet-choo-ah'naz*), Trans-Vaal (*vahl*) Republic, and Orange River Republic.

Capital Cities.—State the situation of each :—Morocco, Algiers, Tunis, Tripoli, Cairo (*ki'ro*), Khartoom', Gon'dar, Zanzibar, Mozambique, Pietermaritzburg (*pe'ter-mahr'itz-burg*), King William's Town, and Cape Town.

St. Felipe de Benguela (*fa-le'pa da ben-ga'lah*), St. Paul de Loando, St. Salvador, Benin (*ben-ee'n*), Abeokenta, Abomey (*ab-o-ma*'), Coomassie, Monrovia, Free Town, Mourzouk (*moor-zook*'), Sego, Timbuctoo, Sackatoo, Kouka (*koo'kah*), Masena (*mah-sa'nah*), Wara (*wah'rah*), Cob'be, El Obeid (*el o-ba'eed*), Portefestrom, and Bloemfontein (*bloom-fon-tine*'). (See Map of Cape Colony.)

LESSON CLI.

Important Places in the Barbary States, Egypt, and Nubia.—State the situation of each :—Tangier (*tahn-jeer*'), Mogadore, Mequinez (*mek'e-nez*), Fez, Oran (*o-rah'n*'), Constantine (*kon-stahn-teen*'), Kairwan (*kire-wahn*'), Mesrata (*mes-oo-rah'tah*), Bengazi (*ben-gah'ze*), Derne (*der-neh*'), Alexandria, Suez, Siout (*se-oot*'), Es'neb, Ipsambool (*ip-sahn-bool*'), Derr, Suakin (*swah'kin*), Sennaar (*sen-nar*'), New Dongola, and Berber.

In Abyssinia and Eastern Africa.—State the situation of each :—Masonah (*mas'soo-ah*), Anko'bar, Ber'bera, Magadoxo, Mombaz, Quiloa (*ke'lo-ah*), Kazeh (*kah'zeh*), Quilinnane (*ke-le-mah'na*), and Sofala (*so-fah'lah*).

In Southern and Western Africa.—State the situation of each :—Graham's Town, Simon's Town, Loango, Cape Coast Castle, Elmina (*el-me'nah*), Timbo, Bathurst, and St. Louis.

LESSON CLII.

Important Places in Sahara and Central Africa.—State the situation of each :—Air (*ah-er*'), Tisheet (*te-sheet*'), Taudeny (*tau'de-ne*), Tibestiy (*te-bes-te*'), Boussa (*boo'sah*), Kano (*kah'no*), and Sesheke (*sa-sha'ka*).

Islands.—Describe each :—Socotra, Seychelle (*sa-shel*'), Amirante (*am-e-rant*'), Cosmoledo (*kos-mo-la'do*'), Zanzibar, Com'oro Islands, Madagascar, Mauritius (*maw-rish'e-us*), Bourbon, St. Hele'na, Ascension, Cape Verde Islands, Canary Islands, Madeira, and Azores.

Capes.—Describe each :—Bon, Guardafui (*gwar-dah-fwe*'), Corrientes, Agulhas (*ah-gool'yahs*), Good Hope, Frio (*fre'o*), Lopez, Palmas (*pahl'mahs*), Verde, Blanco, Ambro, and St. Mary.

LESSON CLIII.

Mountains.—Describe each :—Atlas, Black, Moon, Snow, Cameroons, Kong, Mt. Atalanta, Mt. Ke'nia, and Mt. Kilimanjaro (*kil-e-mahn-jah-ro*').

Gulfs and Bays.—Describe each :—Capes (*kah'bes*), Sid'ra, Sofala, Delago'a, and Guinea.

Channel.—Describe it :—Mozambique.

Lakes.—Describe each :—Dembea (*dem'be-ah*), Batti (*baht'te*), Nyassa (*ne-ahs'sah*), Shirwa, Dobbie, Tchad (*chahd*), Fittre (*fit'tra*), Albert Nyanza (*ne-ahn'zah*), Victoria Nyanza, Tanganyika (*tahn-gahn-ye'kah*), Dilolo (*de-lo'lo*), and Ngami (*n'gah'me*).

Rivers.—Describe each :—Nile, Blue, White, Haines, Mato'ni, Zambezi (*zahn-ba'ze*), Limpopo, Orange, Black, Swakop (*swah'kop*), Nourse, Coanza (*ko-ahn'zah*), Congo, Gaboon', Niger, Chad'da, Gambia, Senegal (*sen-e-gawl*'), Yecoo (*ya-oo*'), and Shary (*shah're*).

QUESTIONS ON THE MAP OF AFRICA,

PROMISCUOUSLY ARRANGED.

LESSON CLIV.

I. Bound Africa. What countries of Africa border on the Mediterranean Sea? On the Red Sea? On the Indian Ocean and Mozambique Channel? On the Atlantic? What is the most southerly country of Africa? The most northerly? The most westerly? The most easterly? What mountains lie on the northern boundary of Upper Guinea? On the western boundary of Zanguebar?

II. What three cities are situated at the mouths of the Nile? (See Map of Egypt.) By what is Suez connected with Alexandria? What lakes are south-east of Alexandria? On which side of the Nile are Benisouef (*ben-e-suef*) and Minieh (*me'ne-yeh*)? Where are the Pyramids? Where are the ruins of Thebes? Where is the Nubian Desert? The Libyan Desert?

III. What rivers cross Liberia? (See Map of Liberia.) What lies south-east of Liberia? What settlements are in Maryland? What cape is on the coast? What mountains north of Maryland? What islands are west of Senegambia? West of Lower Guinea? West of Morocco? To what country do the Canary Isles belong? The Madeira Isles? What city is the capital of the Madeira Isles? Funchal. To what country do the Azores belong?

IV. What cape projects from the north coast of Madagascar? From the south coast? What mountains are in Madagascar? What place is the capital? Tananarivo (*tah-nah-nah-re-voo*). What two islands lie east of Madagascar, and to what countries do they belong? What islands lie in Mozambique Channel? What islands lie north-east of Madagascar?

V. What rivers form most of the northern boundary of Cape Colony? (See Map of Cape Colony.) What mountains in the southern part? Mention some of the towns of Cape Colony. What bays indent the coast? What countries lie between the Indian Ocean and the country of the Bechuanas? Which of these border on the Indian Ocean? Where is Palmerston? Smithfield?

VI. What lakes are in Ethiopia? By whom and when were they respectively discovered? What two noted peaks belong to the Mountains of the Moon? Where is the Kalahari Desert? What countries of Africa have no sea-coast? What countries of Africa are in the torrid zone? In the north temperate? In the south temperate? What is the longest river of Africa? The largest city? C.

VII. Between what degrees of latitude does Africa extend? Between about 37° N. lat. and 35° S. lat. What capital city in the United States is in about the same latitude as Fez? Columbia, in South Carolina. Between what degrees of longitude does Africa lie? Between about 17½° W. and 51½° E. lon. What country of Europe extends about as far west as Morocco? Ireland. How does Africa compare in size with South America? It is nearly as large again as S. America.





ANIMALS AND PLANTS OF AFRICA.

- | | | |
|------------------|-------------------------------|-------------------------|
| 1. Hippopotamus. | 9. Great African king-fisher. | 16. Sable antelope. |
| 2. Cape buffalo. | 10. Giraffes. | 17. Gemsbok. |
| 3. Lion. | 11. Zebras. | 18. Ostrich. |
| 4. Jackal. | 12. African elephant. | 19. Gnu. |
| 5. Gorilla. | 13. Springbok. | 20. African rhinoceros. |
| 6. Lemur. | 14. Hartbeeste. | 21. Babyrousa. |
| 7. Baboon. | 15. Arabian camel. | 22. Vlacke vark. |
| 8. Chimpanzee. | | 23. Crocodile. |
-
- | | | | |
|------------------|------------------------------------|-----------------------|------------------------|
| a. Papyrus. | d. Encephalartos corridns. | f. Date palm (pænix). | i. Strelitzia angusta. |
| b. Water lilies. | e. Acacia giraffæ, or camel-thorn. | g. Euphorbia. | j. Musa. |
| c. Livistonia. | | h. Guinea oil-palm. | |

LESSON CLV. AFRICA.

Geographical Position, etc.—Africa lies south-west of Asia, from which it is separated by the Suez Canal and the Red Sea. Its greatest length from north to south is about 5,000 miles; and its greatest breadth, 4,800.

Physical Features.—Although much of Africa is yet unexplored, it is known that it contains more desert land than any of the other grand divisions. It is supposed that the surface rises in terraces from the coast, forming in the interior an immense plateau.

Inhabitants, etc.—Africa, except the northern part and some settlements on the coast, is inhabited by negro tribes, whose religion is Pagan and their condition barbarous. The inhabitants of northern Africa belong chiefly to the Caucasian race. Respecting the past history and present condition of the interior of Africa, we know very little.

Political Divisions.—The chief divisions of Africa are Morocco, Algeria, Tunis, Tripoli (together called the Barbary States), Egypt, Nubia, Abyssinia, the Country of the Somaules, Zanguebar, Mozambique, the Zoolu Country, Natal Colony, Caffraria, Cape Colony, the Hottentot Country, the Country of the Bechuanas, the Trans-Vaal Republic, the Orange River Republic, Cimbebas, Guinea, Liberia, Sierra Leone, Senegambia, Sahara, Soudan, and Ethiopia.

The boundary lines of many of these divisions are very indefinite.

THE EMPIRE OF MOROCCO.

Geographical Position, etc.—Morocco, the most important of the Barbary States, occupies the north-western extremity of Africa. The surface is mountainous, interspersed in some parts with fine plains and valleys. The soil is celebrated for its fertility; and the climate, in the higher regions and on the coast, is mild and healthy. Fruits are plentiful; and grain, sugarcane, cotton, and tobacco, are raised in considerable quantities.

Inhabitants, etc.—These are chiefly Moors, Jews, Berbers, and Arabs. The prevailing religion is Mohammedan. Agriculture is rudely conducted. There is some trade with Arabia and the negro tribes south of the Great Desert. Traveling facilities are very inferior. Inland commerce is carried on by means of caravans. The chief manufactures are carpets, cloth caps, leather, earthenware, and silk fabrics; the exports are fruit, wax, olive-oil, wool, carpets, hides, skins, gum, indigo, salt, leather, and leeches.

Important Places.—Morocco, the capital, is surrounded by a wall thirty feet in height, and contains many beautiful mosques. TANGIER carries on an active trade with the Spanish ports. MOGADORE is the chief seaport. Fez is celebrated for its trade in red and yellow morocco.

THE COLONY OF ALGERIA.

Geographical Position, etc.—Algeria, a colony of France, extends along the Mediterranean for about 600 miles. The surface is mountainous. The only good soil is in the valleys between the mountains and the coast. The climate is temperate and healthy. The productions are like those of Mo-

rocco, with the exception of sugar-cane and cotton. The coral and sponge fisheries on the coast, are valuable. Iron, copper, and lead, are the chief minerals.

Inhabitants, etc.—These are mainly Berbers, Jews, Moors, Turks, Arabs, and negroes, together with some French and other European settlers. The French are Roman Catholics; the natives, Mohammedans. Some attention is paid to agriculture, mining, and manufactures. The chief manufactures are linen, woolen, and silk fabrics, saddles, carpets, hardware goods, and coarse pottery. Among the exports are coral, skins, bones, horns, wool, wax, oil, ostrich-feathers, and barks for tanning purposes.

Important Places.—ALGIERS, on a bay of the same name, is the capital. CONSTANTINE carries on an active trade in the products of Central Africa.

TUNIS.

Geographical Position, etc.—Tunis lies east of Algiers. The interior is but little known, there being few facilities for travel. The soil is fertile; the climate, temperate and healthy. The chief productions are grain, olives, tobacco, and tropical fruits.

Inhabitants, etc.—The inhabitants consist of Arabs, Jews, Turks, and Moors,—mostly Mohammedans. Agriculture is neglected. The manufactures are red woolen caps, embroidery, leather, boots, slippers, soap, and essences. Oil, wood, sponges, red caps, soap, and essences, form the chief exports.

Important Places.—TUNIS, the capital and largest commercial city, stands on a gulf of the same name. KAIRWAN is noted for its manufactures.

TRIPOLI.

Geographical Position, etc.—Tripoli, including Barca and Fezzan, lies between the Mediterranean Sea and the Great Desert. In the eastern part are extensive tracks of sand; in the south, the surface is mountainous; in the west, diversified. The soil is generally fertile. From May to September, the heat is intense. The productions are like those of Tunis.

Inhabitants, etc.—The towns are inhabited chiefly by Moors and Jews; the rural population consists of Arabs. Religion, Mohammedan. Traveling facilities are inferior. Among the leading manufactures are carpets, cloaks, articles made of goats' hair, leather, potash, and coarse earthenware. The chief exports are dates, olives, rock salt, and manufactured goods.

Important Places.—TRIPOLI, the capital, on the Mediterranean coast, carries on considerable trade with the interior of Africa.

FEZZAN is ruled by a sultan, who pays an annual tribute to the Pashaw of Tripoli. The people are a mixed race, of Arabic and negro extraction. MOURZOUK, the capital, is a great rendezvous for caravans.

EGYPT.



FLAG OF EGYPT.

Geographical Position, etc.—Egypt lies between the Mediterranean Sea and Nubia. Its great natural feature is the River Nile. The valley of this river is very narrow, being shut in by high rocks, beyond which the country is mostly a desert.

Soil, etc.—The valley of the Nile is rendered exceedingly fertile by the annual inundations of the river. The climate of Egypt is hot and dry. Grain,

cotton, rice, indigo, and various drugs and fruits, are among the chief productions. Beans and *dhourra* (a kind of grain) are extensively cultivated.

Inhabitants, etc.—Most of the inhabitants (called Fellahs) are of Arabic descent; the remainder are Copts, Turks, Greeks, Jews, etc. They are an ignorant and degraded people. The prevailing religion is Mohammedanism. Agriculture forms the leading pursuit.

Antiquities.—Along the Nile are many specimens of ancient art,—pyramids, temples, statues, obelisks, sphinxes, and caves hewn in the rocks.

Traveling Facilities.—Roads and canals have recently been constructed, and a railroad has been built between Alexandria and Cairo.

Manufactures and Exports.—The chief manufactures are linen goods, carpets, silk handkerchiefs, jewelry, and pottery. The leading exports are cotton, rice, wheat, rose-water, indigo, senna, dates, opium, coffee, gums, porous earthenware jars, matting, and carpets.

Important Places.—CAIRO, the capital, is the largest city in Africa. ALEXANDRIA, about 100 miles from Cairo, is a celebrated seaport. DAMIETTA, on the east branch of the Nile, is largely engaged in trade.

NUBIA.—Nubia, a large country under the dominion of Egypt, lies between it and Abyssinia. The surface, soil, and climate, are like those of Egypt. The chief productions are *dhourra*, barley, cotton, indigo, senna, coffee, and dates. Ebony-trees are numerous.

Inhabitants, etc.—The Nubians, who, as a people, are superior to the Egyptians, belong partly to the Caucasian, and partly to the negro, race; they are mostly Mohammedans. Slaves constitute the chief article of traffic. The only manufactures are a few domestic articles; the exports are chiefly the products received from Central Africa.

Important Places.—KHARTOUM, the capital, is the rendezvous for slave caravans and the residence of the viceroy. SUAKIN, on the Red Sea, has a good harbor, and is an important station for pilgrims on the way to and from Mecca.

LESSON CLVI.

ABYSSINIA.

Geographical Position, etc.—Abyssinia, a mountainous and well-watered country, lies south-east of Nubia. It is divided into several states, respecting which but little is known. The soil is remarkable for its fertility. The climate is intensely hot in the valleys. Cotton, flax, coffee, and *teff*, a plant from which bread is made, are cultivated.

Inhabitants, etc.—The inhabitants comprise different tribes, many of them barbarous. Their religion is a corrupt Christianity. Leather, coarse cotton and woolen goods, sword-blades, spear-heads, etc., are the only manufactures. The chief exports are gold-dust, ivory, and slaves.

Important Places.—GONDAR, the capital, is about 20 miles from Lake Dembea. ANKOBAR, 300 miles from Gondar, is next to it in importance.

EASTERN AFRICA.

Geographical Position.—Eastern Africa embraces the countries on the coast, between Abyssinia on the north and the Zoolu Country on the south.

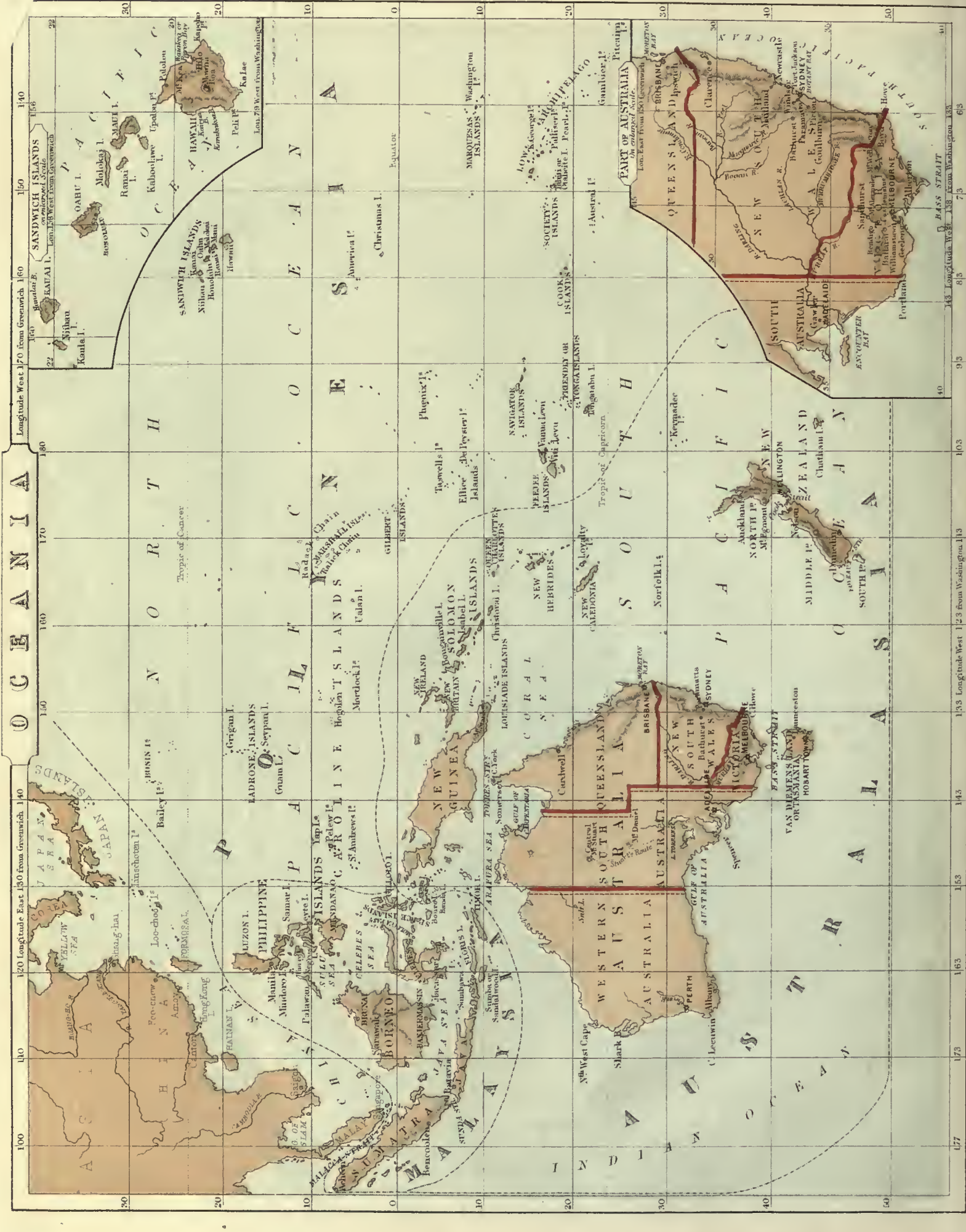
Divisions, etc.—The chief divisions of Eastern Africa are, 1. The Country of the Somaules, occupied by numerous tribes. 2. Zanguebar, which is partly subject to the Sultan of Muscat, partly to native princes; it exports rice, sugar, gums, elephants' tusks, and ostrich-feathers. 3. Mozambique, which is claimed by the Portuguese; it exports ivory, slaves, gold, and coffee.

Important Places.—BERBERA, in the Country of the Somaules, is noted for its annual fair. ZANZIBAR is the capital, and MAGADOXO the chief port, of Zanguebar. MOZAMBIQUE, QUILIMANE, and SOFALA, are the chief settlements on the coast of Mozambique. They are in the possession of the Portuguese, who have made Mozambique their capital.

SOUTHERN AFRICA.

Divisions, etc.—The chief divisions of Southern Africa are, 1. The Zoolu Country, lying south of Mozambique. 2. Natal, a colony of Great Britain; it produces cotton, indigo, sugar-cane, and various fruits. 3. Caffraria, partly under the dominion of the British, and partly under the con-

O C E A N I A



trol of the natives. 4. Cape Colony, a dependency of Great Britain, inhabited by British settlers, Dutch farmers, or Boors, Hottentots, and Caffres. The soil is fertile, the climate changeable. Corn, wine, wool, hides, horns, ivory, and butter, are exported. 5. The Country of the Hottentots, inhabited by various degraded tribes. 6. The Transvaal and the Orange River Republic, which lie west of the Zoolu Country and Caffaria. They are inhabited by native tribes and Dutch farmers, the latter being the ruling people. 7. The Country of the Bechuanas, west of the two republics just named.

Important Places.—PIETERMARITZBURG, about 50 miles from the coast, is the capital of Natal Colony; KING WILLIAM'S TOWN, of the British possessions in Caffaria. CAPE TOWN is the capital and chief seaport of Cape Colony; vessels often stop there, to procure water and provisions.

WESTERN AFRICA.

This region extends along the western coast, from the Country of the Hottentots to the Great Desert of Sahara.

THE COUNTRY OF THE CIMBERRAS, which lies north of that of the Hottentots, is but little known; the people reside chiefly in the interior, and possess large herds of cattle.

GUINEA is subdivided into several states; the chief of these are Ashantee, Dahomey, Benin, Loango, Congo, Ango'la, and Benguela. They are inhabited by various tribes of negroes, who live in a state of barbarity.

Among the vegetable productions of Guinea, the palm-tree is the most useful. Its nuts when young are eaten roasted, and when old yield an oil which the natives use with their food. From the trunk of the tree is drawn a species of wine, and ropes, nets, etc., are made from the leaves. The negro traders bring ebony, palm-oil, gold-dust, slaves, and ivory, from the interior to the coast, and exchange them for beads, gunpowder, fire-arms, tobacco, etc.

LIBERIA, a negro republic, extends along the coast about 320 miles. It was established by the American Colonization Society in 1821, as a place of refuge for free blacks and those who might become free in the United States. It became a republic in 1848. Agriculture is extensively pursued, and commerce is largely increasing. MONROVIA is the capital.

SIERRA LEONE, a colonial possession of Great Britain, lies on the coast of Senegambia. FREE TOWN is the capital.

SENEGAMBIA is an extensive region of Western Africa, lying south of the Great Desert. The climate is intensely hot, and the productions are varied. The inhabitants are chiefly negroes. The country gets its name from its two principal rivers, the Senegal and the Gambia. BARBANT, on an island at the mouth of the Gambia, is a small British settlement.

Sahara, or the Great Desert, forms a part of Northern Africa, and is situated south of the Barbary States. There are a few fertile spots in this vast desert, called *oases*, where caravans

passing between the Barbary States and Central Africa obtain their supplies of water. Gum-arabic is obtained in abundance from large forests of acacias on the southern borders of Sahara.

CENTRAL AFRICA.

Central Africa comprises Soudan and Ethiopia. Soudan is a fertile country, divided into several states, and well populated. But little is known respecting Ethiopia. In 1859 Lake Victoria Nyanza was discovered by Captain Speke, and in 1864 Lake Albert Nyanza by Mr. Baker; these two lakes are supposed to be the sources of the River Nile. Lakes Tanganyika and Nyassa, farther south, were discovered in 1859, the former by Captain Burton, the latter by Dr. Livingstone.

MADAGASCAR, a very large island east of Mozambique, is inhabited by tribes of negro and Malay extraction, some of whom are partially civilized. The island abounds in mineral wealth, in rice, cotton, spices, and magnificent timber.

STUDIES ON THE MAP OF OCEANIA,

SYSTEMATICALLY ARRANGED.

LESSON CLVII.

Islands and Island Groups of Polynesia.—Describe each:—Bor-
nin (*bo-neen*),* Sandwich, Kanai (*kone-i*),† Oahu (*oak'ho*),
Hawaii (*hah-ai*), America, Christmas Island, Marquesas (*mar-
ka'sais*), Washington Island.

Low Archipelago, King George, Pal'iser, Pearl, Gambier,
Pitcairn Island, Austral, Society, Tahiti (*tah-he'te*), Cook,
Friendly, Fee'jee, Navigator, Ellice, De Peyster, Taswell's,
Phoenix, Gilbert, Marshall, Radack (*rah'dak*) Chain, Ralick
(*rah'lik*) Chain, Caroline, St. Andrew's, Pelew', and Ladrone.

Islands and Island Groups of Australasia.—Describe each:—New
Guinea, New Britain, New Ireland, New Caledonia, Norfolk,
Chatham, Van Diemen's Land,—Louisade (*loo-e-e-ahd'*), Sol-
omon, Queen Charlotte's, New Hebrides, Loyalty, Kermadec',
and New Zealand.

Islands and Island Groups of Malaysia.—Describe each:—Cele-
bes, Timor (*te-more*'), Flo'ris, Sum'ba, Sumbawa (*soom-baw'-
wah*), Java (*jah'val*), Sumatra (*soo-mah'trah*), Borneo,—Phil-
ippine, and Spice.

LESSON CLVIII.

Capital Cities.—State the situation of each:—Brisbane, Syd-
ney, Melbourne, Adelaide, Perth,—Wellington,—and Hobart
Town.

* **NOVEL.**—The Bonin Islands lie in the North Pacific Ocean, north of the
Tropic of Cancer, and east of China.

† **NOVEL.**—Kanai is the northernmost of the Sandwich Islands.

Important Places.—State the situation of each:—Somerset,
Cardwell, Paramatta, Bathurst, Albany,—Auckland, Nelson,
Dunedin,—Launceston (*lahns-tun*), Manila, Macassar, Batavia,
Bencoolen, Acheen (*at-cheen*'), Brunai (*broo'ni*), Banjarmasin
(*bahn-yer-mahs-sin*'), and Sarawak (*sah-rah-wahk*').

Capes.—Describe each:—York, Howe, Coffin, Leeuwin (*lee-
win*), and North-west.

Mountains.—Describe each:—Stuart, Stanley, and Egmont.
Seas.—Describe each:—Arafura (*ah-rah-foo'rah*), Coral,—
Sulu (*soo-loo*'), Celebes, and Java.

Gulfs and Bays.—Describe each:—Carpentaria, Moreton,
Spencer, Australia, and Shark.

Straits.—Describe each:—Torres, Bass, Cook, Foreaux (*fo-
ro*'),—Molucca Passage, Sunda, and Malacca.

Rivers.—Describe each:—Murray, Darling, and Swan.

QUESTIONS ON THE MAP OF OCEANIA,

PROMISCUOUSLY ARRANGED.

LESSON CLIX.

I. In what part of Oceania is Polynesia? Name the principal
groups of Polynesia north of the equator. Name those south of the
equator. Which is the most important of these groups? *The Sand-
wich Islands*. Name the most important of the Sandwich Islands.
(*See Map of Sandwich I.*)

II. What is the capital of the Sandwich I.? *Honolulu (hon-o-loo'-
loo)*. How is Honolulu situated? Which is the largest of the Sand-
wich Islands? What mountains are on Hawaii? Which is the largest
island of Polynesia? *Hawaii*. Of Australasia? *N. G.* Of Malaysia?
B. Of Oceania? *Borneo*.

III. What continent forms part of Oceania? Bound Australia.
Mention the divisions of Australia, and the capital of each. What
Bay is near Sydney? (*See Map of Part of Australia*.) Mention the
principal branches of the Murray River. Name some of the principal
settlements in Victoria.

IV. How does Australia compare in size with the U. S.? *Aus-
tralia is about six-sevenths of the size of the U. S.* Why does it not
appear as large on the map? Which is the largest of the Society
Isles? In what zone is Tahiti? What other name have the Friendly
Islands? In what direction are the Feejee from the Sandwich I.?

V. Name the three islands that make up New Zealand. Which
is the largest? Which contains the capital? On which is Mt. Eg-
mont? What mountain is in New Guinea? Name some of the Sol-
omon Islands. What other name has Sumba?

VI. To what group do the Radack and Ralick Chains belong?
What is there peculiar in the appearance of Celebes? Where is
Gillo'lo situated? What is the principal place in the north of Bor-
neo? In the south? What place is at the northern extremity of
Sumatra? Which is the largest of the Philippine Islands?

LESSON CLX.

OCEANIA, OR OCEANICA.

Geographical Position, etc.—Oceania, one of the Grand Divisions of land on the globe, comprises Australia and most of the islands of the Pacific Ocean. It is divided into Polynesia, Australasia, and Malaysia.

POLYNESIA.

Groups.—The principal groups of Polynesia are the Bonin, Sandwich, Marquesas, Low Archipelago, Society, Cook, Friendly, Navigator, Feejee, Caroline, and Ladrone Islands.

Those which lie south of the equator are called the South Sea Islands, and those on the north are embraced under the name of Micronesia.

Soil, etc.—In the mountainous islands, the soil is exceedingly fertile. The climate is warm, and vegetation rich. Tropical fruits and flowers of brilliant hues abound. Palms, cocoa-nut trees, and tree-ferns flourish. The bread-fruit is an important article of native diet. The chief minerals are gold, diamonds, copper, lead, coal, tin, and rock salt. The principal animals are orang-outangs, monkeys, kangaroos, Malay tapirs, etc. Black swans and birds of paradise are among the birds.

Inhabitants, etc.—Polynesia is inhabited by tribes of a light-brown color, allied to the Malay race; they are in a savage condition, except where Christianity and civilization have been introduced by missionaries.



FLAG OF THE SANDWICH ISLES.

THE SANDWICH ISLES, the most important group of Polynesia, lie in the North Pacific Ocean, 1,800 miles west of California.

Surface, etc.—In Hawaii, the largest island of Polynesia, there are several active volcanoes. The climate is mild and salubrious. Wheat is raised in the uplands; in the valleys, coffee, sugar, cotton, tobacco, arrow-root, cocoa, bread-fruit, yams, etc., are produced.

Inhabitants, etc.—The natives have embraced Christianity and made considerable advance in civilization. The commerce of the islands is extensive, constant communication being maintained with San Francisco. The chief exports are sugar, coffee, whalebone, and whale-oil.

HONOLULU, the commercial emporium and capital of the group, is situated on the island of Oahu.

SOCIETY ISLES.—This group, in the South Pacific Ocean, consists of Tahiti, which is about 32 miles long, and a number of smaller islands.

All the islands are more or less mountainous; the soil is fertile. The principal commerce consists in the exportation of pearl-shells, sugar, cocoa-nut oil, and arrow-root, by the foreigners settled there. The chief occupations are agriculture (rudely conducted), fishing, and canoe-building.

PAPIETI (*pah-pe-a'te*), a village on the coast of Tahiti, is the capital of the islands. The entire group is under the protection of France.

THE CAROLINE ISLANDS are divided into numerous groups, extending from east to west, over a space of about 2,000 miles. Their climate is mild, and the inhabitants are skillful navigators.

THE LADRONE ISLANDS, about twenty in number, of which only five are inhabited, lie north of the Caroline Group. They present a beautiful appearance, their mountains being covered with perpetual verdure. The chief productions are cotton, indigo, rice, sugar, and plantain. The Caroline and the Ladrone Islands belong nominally to Spain, and form part of the government of the Philippine Islands.

AUSTRALASIA.

This division of Oceania includes the Australian Continent and numerous islands situated in the adjacent waters.

AUSTRALIA.

Geographical Position.—Australia lies south of the equator, between the South Pacific Ocean on the east, and the Indian Ocean on the west.

Divisions.—Australia is divided into five colonies, belonging to Great Britain; viz., Queensland, New South Wales, Victoria, South Australia, and Western Australia.

Physical Features.—The greater portion of the interior is yet unexplored; those parts that have been visited, are dry and barren plains. The most elevated mountain range of this country extends along its eastern coast.

Soil, etc.—In the eastern, south-eastern, and south-western parts, there are large tracts of fertile land. The climate is, in general, dry and healthy; in the north, it is intensely hot. Both the vegetable and animal productions present the most striking contrast to those of other parts of the world. The native trees are all evergreens; and the forests consist chiefly of acacias, gum-trees, and gigantic ferns. Many of the food-plants of Europe have been introduced, and are now cultivated with success.

Inhabitants, etc.—The aborigines belong to the negro family. The whites, consisting chiefly of British settlers and their descendants, are rapidly increasing, owing to the discovery of gold-mines in the south-eastern districts. The leading pursuits of the settlers are mining and the production of wool.

Exports.—The chief exports are gold, wool, tallow, and hides.

Cities.—SYDNEY, the capital of New South Wales, is rapidly advancing in population and commercial importance. MELBOURNE, the capital of Victoria, lies near the mouth of the Yarra Yarra River.

PAPUA, or NEW GUINEA, lies north of Australia. The interior of the island is supposed to be mountainous. The inhabitants are partly Malays and partly Papuan negroes. Fine woods, medicinal barks, pearls, birds-of-paradise, etc., are brought from this island by traders.

NEW ZEALAND, a colony of Great Britain, comprises North, Middle, and South Island, with several small adjacent isles.

The interior of the islands is hilly, and in parts mountainous. The soil is fertile; the climate, mild and damp. European fruits and vegetables are successfully cultivated. There are no wild animals or noxious reptiles. The chief minerals are copper, sulphur, and iron.

The natives belong to the Malay race. Most of them still retain their barbarous customs. The chief exports are wool, flax, timber, and the produce of the whale fishery. AUCKLAND, on North Island, is the capital.

VAN DIEMEN'S LAND.—This island, a colony of Great Britain, is situated south of Australia. The surface is mountainous, and the soil not very fertile. The climate is colder than that of Australia. Sheep form the most important source of wealth. The leading exports are wool, whalebone, and whale-oil.

HOBART TOWN, the capital of the colony, lies on the southern coast.

MALAYSIA, OR THE ASIATIC ARCHIPELAGO.

This division of Oceania consists of a range of large islands lying directly south-east of Asia. They are sometimes styled the East Indies.

The soil is very fertile, and the climate warm. The larger islands produce sugar, coffee, tobacco, indigo, cotton, and valuable timber, while the smaller ones yield spices and aromatics. Rice is everywhere extensively cultivated; sago is raised in the eastern islands. The natives of Malaysia are chiefly of the Malay race.

THE PHILIPPINE ISLES, about 1,000 in number, lie in the northern part of Malaysia. They belong, for the most part, to Spain.

The surface of the larger islands is mountainous. The climate is moist, but not warm for the latitude. More than half the population are Malays; the remainder are Papuan negroes, Chinese, European and other settlers.

Coarse earthenware, hats made from the fibers of cane, mats, cigar-cases, and rope, are the chief articles of native manufacture. Rice, sugar, hemp, cigars, rope, and sapan-wood, are the chief exports. **MANILA**, the capital of the Philippine group, is the seat of an extensive trade.

THE MOLUCCAS, OR SPICE ISLANDS, are subject to the Dutch. They are celebrated for their spices, particularly nutmegs and cloves.

JAVA, a large island, situated between the Java Sea and the Indian Ocean, is the chief seat of the Dutch power in the East. The southern part of the island is elevated. Volcanoes are numerous. The soil is rich, and is noted for the variety and abundance of its productions. Cotton, sugar, rice, and coffee, are raised in large quantities, and form the leading exports. The climate is hot.

The Javanese belong to the Malay race, and are superior to the other nations of Malaysia. Their religion is Mohammedan; agriculture is the chief pursuit. **BATAVIA**, on the northern coast, is the capital of the Dutch settlements in the East Indies, and their great commercial emporium.

SUMATRA lies in the Indian Ocean, immediately under the equator. The western side is mountainous; the eastern spreads out into plains. The soil is fertile; the climate, hot and moist. The natives are chiefly

Malays. The staple production is pepper, which, with camphor, benzoin, cinnamon, ebony, rattans, sandal-wood, aloes, and sago, is largely exported.

BORNEO.—This immense island, which exceeds in size the united areas of our Eastern and Middle States, lies in the center of Malaysia. The shores are low; the interior is supposed to be mountainous and well-watered. Among the many vegetable productions are maize, rice, yams, sago, coffee, cotton, pepper and other spices, cocoa-nuts, tobacco, and gutta-percha. The mineral products are of the richest kind, comprising gold, diamonds, platinum, tin, antimony, copper, and iron.

The inhabitants consist of aborigines (sometimes called Dyaks), Malays, Chinese, and Boogis from Celebes. The northern and the north-western coast, comprising the territory of Borneo Proper, are under the control of Great Britain; most of the remaining coast belongs to the Dutch.

The leading exports are camphor, gold, diamonds, edible birds'-nests, and trepang (a gelatinous substance found adhering to rocks, esteemed a great luxury by the Chinese).

CELEBES, an irregularly shaped island, lies east of Borneo. Dense forests clothe the mountain sides. The well-known Macassar oil is extracted from the *badeau*-tree. Celebes is divided chiefly among independent nations, of whom the Boogis are the principal; the Dutch possess the settlement of Macassar, on the south-western coast. The leading exports are edible birds'-nests, hides, cotton, tortoise-shell, and spices.

GENERAL REVIEW.

Continents and Grand Divisions.

In what hemisphere and in what zones are the following?

Eastern Cont.?	Africa?
Antarctic?	North America?
Western?	Oceania?
Australian?	Europe?
Asia?	South America?

Oceans.

What coasts do they wash?

Pacific?	Antarctic?
Atlantic?	Arctic?
Indian?	

Important Seas.

What coasts do they indent, and of what bodies of water are they branches?

Mediterranean?	North?
Caribbean?	Yellow?
Japan?	Irish?
Adriatic?	China?
Red?	Baltic?
Celebes?	Okhotsk?
Marinora?	Ionian?
Kantehatka?	Kara?
White?	Azov?
Black?	Arabian?
Adriatic?	Behring?

Important Gulfs and Bays.

What shores do they indent, and to what bodies of water are they tributary?

St. Lawrence?	Naples?
Chesapeake?	Persian?
Biscay?	Panama?
Tonquin?	Dublin?
Bothnia?	Guinea?
Guayaquil?	Honduras?
San Francisco?	Bengal?
Venezuela?	Hudson?
Lyons?	Taranto?
Baffin?	Galway?
Passamaquoddy?	Trinity?
Valentia?	Siam?

Massachusetts?	Fundy?
Genoa?	Delaware?
Penobscot?	Campeche?
Georgian?	Mexico?
Finland?	Green?
California?	Tampa?
Tehuantepec?	Casco?
Australia?	Carpentaria?

Important Lakes.

Where are the following lakes?

Superior?	Titicaca?
Baikal?	Tehad?
Geneva?	Constance?
Huron?	Erie?
Great Slave?	Onega?
Ladoga?	Michigan?
Ontario?	Winnipeg?
Albert Nyanza?	Nyassa?

Important Navigable Rivers.

Where does each rise, and through what country or countries does it flow?

Hudson?	Alabama?
Ganges?	Rhine?
Mississippi?	Delaware?
Volga?	Vistula?
Penobscot?	Cumberland?
Po?	Don?
St. Lawrence?	Alleghany?
Connecticut?	Amoor?
Danube?	Mobile?
Wisconsin?	Kennebec?
Yang-tse-kiang?	Ottawa?
Detroit?	Weser?
Elbe?	Thames?
Shannon?	Missouri?
Tennessee?	Nile?
Indus?	Kentucky?
Illinois?	Irrawaddy?
Loire?	Kansas?
Wabash?	Oder?
San Joaquin?	Forth?
White (Ark.)?	Red?

Columbia?	Sacramento?
Muskingum?	Arkansas?

Important Countries.

Bound each, and state in what zone or zones it is situated.

France?	Arabia?
United States?	Prussia?
Brazil?	Hindostan?
Egypt?	Mexico?
China?	Cape Colony?
England?	Russia?

Important Mountain Peaks.

To what range does each belong?

Pike's?	Cotopaxi?
Maladetta?	Hood?
Illimani?	Lomnitz?
Fremont's?	Aconcagua?
Sorato?	Everest?
Marcy?	Blanc?
Chimborazo?	Kilimanjaro?
Washington?	Mitchell?
Shasta?	Corno?
Elburz?	Popocatepetl?

Important Ports.

In what zone and on what water is each?

Halifax?	Naples?
Baltimore?	New York?
Vera Cruz?	Acapulco?
London?	Havana?
Marseilles?	Genoa?
Melbourne?	Honolulu?
Elsinore?	Boston?
New Bedford?	New Orleans?
Sydney?	Rio Janeiro?
Nagasaki?	Hull?
Amsterdam?	Singapore?
Alexandria?	Tangier?
Cape Town?	Oporto?
Venice?	Shang-hai?
Amoy?	Calcutta?
Buenos Ayres?	Valparaiso?

Charleston?	Nantucket?
Salem?	Leith?
Aberdeen?	Simoda?
Aspinwall?	Constantinople?
Canton?	Bremen?
Rotterdam?	Mobile?
Palermo?	Portland?
Montevideo?	Monrovia?
Providence?	Trieste?
Matanzas?	Bombay?
Tripoli?	Hamburg?
Lisbon?	St. John's?
Lubeck?	Limerick?
Smyrna?	Newcastle?
Bangkok?	Callao?
Adelaide?	Belfast?
Ningpo?	Belfast (Me.)?
Portland?	Philadelphia?
San Francisco?	Cork?
Dundee?	Galveston?
Brighton?	Sacramento?
Newburyport?	Bahia?
Bordeaux?	Liverpool?
Savannah?	Stettin?
Galway?	Antwerp?
Matanzas?	Quilimane?
Dublin?	Madras?
Monterey?	Leghorn?
Pernambuco?	Marblehead?
Bristol?	Norfolk?
Port Mahon?	Londonderry?
Ostend?	Key West?
Tunis?	Jersey City?
Newport?	Wilmington (N.C.)?
Brooklyn?	Toulon?
Pensacola?	Barcelona?
New London?	Para?
Olympia?	Dover?
Havre?	Dantzic?
Waterford?	Salonica?
Pondicherry?	Mozambique?
Batavia?	Colombo?
Southampton?	Auckland?
Brest?	Cronstadt?
Panama?	Toronto?

GEOGRAPHICAL TABLES,

Arranged alphabetically, with the Pronunciation of the Proper Names, and Statistics of Area, Population, etc.

In compiling the following Tables, recourse has been had to the most recent authorities. The numbers given in connection with many of the natural and political divisions of South America, Asia, and Africa, are simply estimates; a blank indicates that we have not sufficient information even to form an estimate.

PRONUNCIATION.—In the second column the word is re-spelled in such a way as to indicate its pronunciation. Sound *ay* like *a* in *fate*; *a* like *a* in *cat*; *ä* like the obscure sound of *a* in *Florida*; *eh* like *e* in *met*; *ih* like *i* in *pin*; *o* like *o* in *go*; *ö* like *o* in *not*; *ö* almost like *u* in *fur*; *oo* as in *soon*; *öö* like *oo* in *book*; *ow* like *ow* in *now*; *gh* like *g* in *go*; *n'* like the nasal *n* in the French language.

Continents.											
	Sq. Miles.	Population.		Sq. Miles.	Population.		Sq. Miles.	Population.		Sq. Miles.	Population.
Australian,	aws-tra'le-än,	3,000,000	1,100,000	Egypt,	e'jipt,	175,000	3,000,000	Orange River Re-	ör'ange,	30,000	
Eastern,	east'ern,	35,525,000	1,011,000,000	England,	ing'gländ,	51,200	20,000,000	public,	ör'e-gon,	101,400	59,465
Western,	west'ern,	14,600,000	65,150,000	Ethiopia,	e-thi-o'pe-ä,	2,500,000	4,000,000	Palestine,	pal'es-tine,	11,000	
				Farther India,	in'de-ä,	900,000	22,000,000	Papal States,	pa'päl,	4,550	700,000
				Fezzan,	fez-zahn',	138,000	100,000	Paraguay,	pah-rah-gwi',	84,000	1,000,000
				Florida,	flör'e-dä,	59,270	140,424	Patagonia,	pat-ä-go'ne-ä,	300,000	120,000
				France,	france,	204,800	37,472,700	Pennsylvania,	pen-sil-va'ne-ä,	46,000	2,906,215
				French Empire,	en'pire,	351,000	41,000,000	Persia,	per'she-ä,	400,000	2,500,000
				French Guiana,	gh'e-ah'nah,	27,560	19,500	Peru,	per-roo',	35,300	3,988,000
				Galicla,	gä'lish'e-ä,	29,000	4,597,470	Portugal,	port'u-gäl,	135,000	23,500,550
				Georgia (Asia),	jör'je-ä,	12,800	300,000	Prussia,	prush'ä,	210,000	1,111,000
				Georgia (U. S.),	jör'je-ä,	58,000	1,057,663	Quebec, Prov. of,	kwe-beck',	145	43,924
				Greece,	greece,	18,500	1,096,800	Rensselaer (older line),	rnce,	330	86,472
				Guatemala,	gwah-la-mah'lah,	48,100	985,000	Rensselaer (younger line),	rode'v'land,	1,300	174,630
				Guinea,	ghin'e,	650,000		Rhode Island,	rush'ä,	5,000,000	9,000,000
				Hesse Darmstadt,	hesa darm'stadt,	1,700	564,475	Russia (Asiatic),	rush'ä,	2,142,500	65,800,000
				Hindustan,	hin-doo-stan',	1,250,000	130,000,000	Russia (European),	rush'än,	480,000	54,000
				Holland,	bol'land,	13,650	3,755,700	Russian America,	rush'än,	8,000,000	75,000,000
				Holstein,	hol'stine,	3,230	554,510	Russian Empire,	rush'än,	2,700,000	1,000,000
				Honduras,	hon-doo-räs,	43,700	350,000	Sabara,	sah-lah'rah,	9,600	394,000
				Hottentot Country,	hot'ten-tot,	175,000		San Salvador,	san sal-vä-dor',	510	141,639
				Hudson Bay Terr.,	hud'sun,	1,900,000		Saxe Altenburg,	saks al'ten-burg,	762	164,627
				Hungary,	hung'gä-re,	82,800	9,000,785	Saxe Coburg-Gotha,	saks co-burg-go'tä,	956	175,065
				Iceland,	ih'dä-ho,	90,000	25,000	Saxe Meiningen,	saks mi'ning-en,	1,403	280,201
				Idaho,	ih-le-noy',	55,410	1,711,951	Saxe Weimar,	saks wi'mar,	5,776	2,943,994
				Illinois,	ih-le-dor,	2,150,000	152,000,000	Saxony,	saks'o-ne,	171	31,882
				India,	in'de-än,	33,810	1,350,812	Schaumburg Lippe,	shöwm'burg lip'p'ch,	371	73,752
				Indiana,	in'de-än,	71,000	110,000	Schwarzburg Rü-	shwartz'burg		
				Indian Territory,	in'do-chi'nä,	900,000	22,000,000	dolstadt,	roo'dol-stahl,		
				Iudo-China,	ih'o-wä,	55,040	674,913	Schwarzburg Son-	shwartz'burg		
				Iowa,	ir'e-länd,	32,500	5,572,000	dershausen,	son-ders-höw'zen,	332	66,189
				Ireland,	ir'ä-le,	119,500	26,785,000	Scotland,	skot'land,	30,000	3,153,500
				Italy,	ih-pän',	270,000	25,000,000	Senegambia,	sen-e-gam'be-ä,	250,000	3,600,000
				Japan,	kan'säs,	78,420	115,395	Siam,	sl'am,	295,000	9,000,000
				Kansas,	ken-tuck'e,	37,680	1,155,684	Siberia,	si-be're-ä,	5,600,000	232
				Kentucky,	kir-ghez',	300,000	2,260,000	Sierra Leone,	se-e'r'rah le-o'ne,	3,600	406,486
				Kirghez Country,	kor-do-fahn',	100,000	500,000	Sleswick,	sles'wik,	1,900,000	14,000,000
				Kordofan,	lah'rä-dor,	170,000	5,000	Somaulies' Country,	so-mav'leez,	20,380	703,708
				Labrador,	li-be're-ä,	25,000	250,000	Soudan,	so-dahn',	44,500	8,524,460
				Liberia,	leck'ten-stine,	53	7,994	Spain,	spän,	183,000	15,752,600
				Liechtenstein,	lip'p'ch det'molt,	425	111,336	States of the Church,	awe'den,	4,550	700,000
				Lippe Detmold,	loo-e-gö,	46,420	708,002	Sweden,	swit's'er-länd,	170,100	3,857,000
				Loango,	main,	31,760	629,248	Switzerland,	sl'r'e-ä,	16,000	2,510,500
				Louisiana,	mau-choo're-ä,	600,000	1,350,000	Syria,	ten-nes-se',	45,000	1,109,801
				Maine,	ma're-länd,	11,120	687,049	Texas,	tex'ä,	227,500	604,215
				Mantchooria,	mas-sä-chu'sette,	7,800	1,231,066	Thibet,	thib'et,	750,000	10,000,000
				Maryland,	mek'len-burg	4,845	552,612	Trans-vaal Rep'e,	trans-vahl',	40,000	
				Massachusetts,	shwa-recn',			Transylvania,	tran-sil-va'ne-ä,	23,073	1,926,797
				Mecklenburg	mek'len-burg	767	99,060	Tripoli,	trip'o-le,	105,000	1,500,000
				Schwerin,	mek'len-burg			Tunis,	tu'nis,	70,000	2,500,000
				Mecklenburg Stre-	atra'lits,			Turkestan,	toor-kes-tahn',	420,000	5,000,000
				itz,	mex'e-ko,	820,000	8,000,000	Turkey (Asiatic),	tnr'ke,	680,000	16,000,000
				Mexico,	mish'e-gän,	50,240	756,800	Turkey (European),	tnr'ke,	203,600	15,725,000
				Michigan,	min-ne-so'p'ä,	83,520	189,023	Tuscany,	tn'e-kä-ne,	8,586	1,801,875
				Minnesota,	mis-sis-sip'p'e,	47,150	792,205	Tyrol,	ti'r-rol,	11,084	851,016
				Mississippi,	mis-soo're,	67,380	1,182,012	United States of	am'roh'e-kä,	3,480,000	32,000,000
				Missouri,	mon-tah'nä,	153,300	20,000	America,	ko-lcm'be-ä,	480,000	2,363,000
				Montana,	mo-ra'v'e-ä,	10,230	1,867,094	Colombia,	hes,	1,270	252,427
				Moravia,	mo-rok'ko,	222,500	7,500,000	Upper Hease,	oo-roo-gwl',	70,000	250,000
				Mozambique,	nah-tahl',	22,000	250,000	Uruguay,	n'tah,	108,000	60,273
				Natal Colony,	ne-bras'kä,	76,930	35,000	Utah,	ver-mont',	40,210	315,098
				Nebraska,	ne-paul',	53,000	2,000,000	Vermont,	vir-jin'e-ä,	70,810	1,246,460
				Nepaul,	na-vah'dä,	55,450	70,000	Virginia,	wäl-dek,	7,400	1,140,000
				Nevada,	brunz'wik,	27,700	234,000	Waldceek,	wösh'ing-tun,	70,000	42,594
				New Brunswick,	hamp'ahir,	9,280	326,073	Washington Terr.,	wir-jin'e-ä,	20,540	376,690
				New Hampshire,	jer'ze,	8,320	672,017	West Virginia,	wir-ten-burg,	63,920	778,714
				New Jersey,	mex'e-ko,	124,500	148,616	Wisconsin,	wir'o'mlug,	7,523	1,748,328
				New Mexico,	york,	47,000	3,884,530	Wyoming,	yem'en,	86,000	
				New York,	nik-ar-ah'gwah,	46,200	257,000	Yemen,	zahn'gha-bar',		
				Nicaragua,	kar-o-li'nä,	60,700	992,622	Zanguebar,	zoo'in,		
				North Carolina,	jer'män,	160,240	29,248,333	Zoolu Country,			
				N. German Confed.,	nor'vä,	123,400	1,328,500				
				Norway,	no'v'ä sko'she-ä,	18,700	331,000				
				Nova Scotia,	nu'be-ä,	320,000	500,000				
				Nubia,	o-hi'o,	39,960	2,339,511				
				Ohio,	oi'den-burg,	2,472	301,812				
				Oldenburg,	o-mahn',						
				Oman,	on-tä-re-o,	140,000	1,396,000				
				Ontario, Prov. of,							

Some of the Chief Islands of the World.

	Area in Sq. Miles.
Andaman,	an-dā-mān', 3,000
Anguilla,	ang'g'le, 270
Anticosti,	an-te-kos'te, 2,600
Antigua,	ah-nu-te'gab, 108
Azores,	az-oz', 2,033
Bahamas,	bā-ha'māz, 4,500
Balearic,	bal-e-ar'ik, 1,750
Barbadoes,	bar-ba'doze, 106
Bermudas,	ber-mu'dāz, 22
Borneo,	bor'ne-o, 286,000
Bourbon,	boor'bun, 890
Canary,	kā-na're, 2,980
Candia,	kau'de-ā, 4,300
Cape Breton,	kape brit'un, 3,100
Cape Verde,	kape verd, 1,680
Caroline,	kar'o-līne, 450
Celebes,	sel'e-biz, 71,791
Ceylon,	se'lon, 24,664
Chiloé,	cheel-o-ā, 4,000
Cook,	kōōk, 1,200
Corseica,	kor'se-kā, 3,360
Cuba,	ku'bā, 43,380
Curaçoa,	ku-rah-so', 250
Cyprus,	si'prus, 4,500
Dominica,	dom-e-ne'kah, 280
Elba,	el'bā, 97
Falkland,	faw'k'lāud, 6,000
Faroe,	fā-ro, 510
Feeje,	fe'je, 8,034
Florida,	flo'ris, 6,000
Formosa,	for-mo'sā, 15,000
Friendly,	friend'le, 2,600
Funen,	fu'nēn, 1,123
Great Britain,	brit'ān, 88,600
Greenland,	green'lānd, 800,000
Guadeloupe,	gwa-de-loop', 534
Haiuan,	hi-nān', 12,000
Haiti,	ba'te, 29,400
Hebrides,	heb're-deez, 3,180
Iceland,	ice'lānd, 38,400
Ionian,	i-o-ne-ān, 1,090
Ireland,	ire'lāud, 32,500
Jamaica,	jā-mā'kā, 5,400
Java,	jah'vāh, 50,000
Jesso,	yes'so, 62,500
Joannes,	zho-ahn'nes, 6,000
Juan Fernandez,	ju'an fer-nān'dez, 60
Kinslu,	ke-o'o'se-o-o', 28,000
Kurile,	koo'r'il, 3,070
Ladrona,	lā-dron'e, 1,200
Long,	long, 1,450
Loe Choo,	loo choo, 1,200
Madagascar,	mad-ā-gas'kar, 240,000
Madaira,	mā-de-rā, 400
Maldiva,	mal'dive, 2,100
Malta,	maw'l'tah, 98
Man,	man, 280
Marzarita,	mar-guh-re'tah, 450
Marquesas,	mar-kā'sahs, 2,800
Martha's Viney'd,	mar'thāz vin'yārd, 120
Martinique,	mar-tin-ek', 380
Mauritius,	mav-rish'e-us, 708
Naunucket,	nau-tuk'et, 50
Navigator's,	nāv'e-ga-turz, 2,650
New Britain,	nu brit'ān, 4,200
New Caledonia,	nu kal-e-de-ne-ā, 8,107
Newfoundland,	nu'fūd-lānd, 36,000
New Georgia,	nu jor'je-ā, 4,600
New Guinea,	nu ghīn'e, 275,000
New Hebrides,	nu heb're-deez, 3,600
New Zealand,	nu ze'lānd, 99,500
Nicobar,	nik'o-bar, 1,400
Nippon,	ne-fon, 110,000
Nova Zembla,	no'vā zem'blā, 22,000
Orkney,	ork'ne, 600
Pelew,	pe-lew, 260
Philippine,	fil'ip-pin, 120,000
Porto Rico,	por-to re'ko, 3,740
Prince Edward,	prīnce ed'wārd, 2,130
Rhode,	rode, 37
Rhodes,	rodez, 420
Saghalien,	sah-gah-le'en, 47,500
Sandwich,	sand'wich, 6,000
Santa Cruz,	sar'tā kroos, 78
Sardinia,	sar-din'e-ā, 9,200
Shetland,	shet'lānd, 1,300
Sicily,	sis'e-le, 10,500
Sikoff,	se-kok'f, 17,300
Society,	so-si'e-te, 2,000
Socotra,	sok-o-trā, 1,000
Solomon,	sol'o-mūn, 8,000
South Shetland,	shet'lāud, 4,000
Spice,	spice, 38,300
Spitzbergen,	spitz-ber'geo, 23,000
Staten,	stat'en, 60
St. Helena,	hel'e-nā, 47
Sumatra,	soo-mah'trah, 128,000
Sumbava,	soom-baw'vāh, 4,000
Tasmania,	taz-mā-ne-ā, 25,000
Terra del Fuego,	tehr'rah del' fwa'go, 50,000
Timor,	te-more', 8,000
Tobago,	to-bā'go, 120
Trinidad,	trin-e-dad', 2,000
Vancouver's,	vau-koo'verz, 16,000
Van Diemen's,	van de'menz, 25,000
Wight,	wite, 130
Zealand,	ze'lāud, 2,840

Some of the Chief Mountains of the World.

	Height of loftiest summit in feet.
Aconcagua,	ah-kon-kah'gwah, 23,910
Adirondack,	ad-e-rōn'dak, 5,379
Alleghany,	al'le-ga-ne, 6,775
Alps,	alps, 15,810
Altai,	ahl-ti', 11,063
Andea,	an'deez, 23,910
Antisana, V.,	ahn-te-sah'nah, 19,140
Apennines,	ap'en-nīnez, 9,523
Ararat,	ar'ā-rat, 17,323
Atlas,	at'lās, 11,400
Balkan,	bahl-kahn', 9,000
Ben Nevis,	ben ne'vis, 4,363
Blanc,	blank, 15,810
Blue Ridge,	blue ridge, 4,260
Brazilian Andea,	brā-zil'yān an'deez, 5,735
Brown,	brown, 15,690
Buckley,	buk'le, 6,775
Cameroon,	kam-er-oonz', 13,760
Cantabrian,	kan-tā-bre-ān, 10,998
Carpathian,	kar-pā-the-ān, 8,779
Cascade,	kas-kade', 14,390
Catskill,	kats'kil, 3,804
Cancasus,	kaw'kās-sue, 18,493
Ceyennes,	se-ven', 5,561
Chimborazo, V.,	chīm-bo-rah'zo, 21,424
Chiquibamba,	choo-ke-bahm'bāh, 21,000
Cihao,	se-bah'o, 8,600
Coast,	coast, 16,735
Colima, V.,	ko-le'mah, 12,900
Cordillera de Cuba,	kor-dil-lā-rah da' koo'bāh, 7,900
Cotopaxi, V.,	ko-to-paks'e, 18,875
Dhawalaghiri,	dā-wol-ā-g'her're, 28,073
Dovre Field,	do'vro fi-el'd', 8,152
Edgemonte,	eg'mont, 10,000
Egmont,	eg'mont, 8,839
Elbrooz,	el-brooz', 14,065
Elburz,	el-boorz', 18,493
Erebus, V.,	ehr'e-bus, 12,400
Etna, V.,	et'nā, 10,574
Everest,	ev'er-est, 29,100
Fairweather,	fair-weth'er, 14,000
Fromont's Peak,	fre'mont's, 13,570
Gramian,	gram'pe-ān, 4,363
Green,	greēn, 4,430
Hecla, V.,	hek'lā, 5,110
Himalaya,	him-ā-lā'yā, 29,100
Hindoo Koosh,	hīn'doo koosh, 20,230
Hood,	hōōd, 14,000
Hooker,	hōōk'er, 15,700
Illman,	eel-ye-mah'ne, 21,181
Kenia,	ke'ne-ā, 20,000
Kilimanjaro,	kil-e-mahn-jah-ro', 20,000
Kiolen,	kyō'len, 8,070
Kong,	kong, 5,000
Knuchinginga,	koon-chīn-jīng'gah, 28,173
Long's Peak,	longz peak, 12,500
Mansfield,	manz'fīeld, 4,279
Marcy,	mar'se, 5,379
Manna Kea, V.,	mōw'nah ka'ah, 13,557
Manna Loa, V.,	mōw'nah lo'ah, 13,175
Mitchell,	mit'chel, 6,732
Moon,	moon, 20,000
Ophir,	o'fir, 13,800
Orizaba, V.,	o-re-sah'bah, 17,380
Parime,	pah-re'mā, 10,500
Pichincha, V.,	pe-chīn'chah, 15,936
Pike's Peak,	pīk'es peak, 14,500
Popocatepeti, V.,	po-po-kah-ta-pet'i, 17,884
Pyrenees,	pīr'e-neez, 11,163
Rocky,	rok'e, 15,690
Shasta,	shas'tā, 14,390
Sierra Madre (Mex.),	se-ch'r'rah mah'dra, 17,884
Sierra Morena,	mo-mā'nah, 5,500
Sierra Nevada (Cal.),	na-vah'dā, 16,000
Sierra Nevada (Spain),	" 11,658
Sinai,	al'nā, 7,497
Snow,	sno, 10,240
Snowdon,	sno'dun, 3,571
Sorata, V.,	so-rah'tah, 11,000
Spanish Peaks,	span'ish peaks, 11,000
St. Elias,	saint e-lī'ās, 17,900
St. Helen's, V.,	saint hel'eniz, 12,000
Tsurus,	taw'rūs, 12,869
Teneriffe Peak,	ten-er'fī, 11,946
Tollma, V.,	to-le'mah, 18,270
Tupungato,	too-poong'gah'to, 22,450
Ural,	n'rāl, 5,387
Vesuvius, V.,	ve-su've-nū, 2,948
Washington,	wosh'ing-tun, 6,288
Wellington,	wel'ing-tun, 6,510
White,	white, 6,288

Oceans.

	Extent in sq. mls. including seas connected with them.
Antarctic,	ant-ark'tik, 20,000,000
Arctic,	ark'tik, 2,000,000
Atlantic,	at-lan'tik, 30,000,000
Indian,	in'de-ān, 25,000,000
Pacific,	pa-sif'ik, 70,000,000

Some of the Chief Lakes of the World, with their estimated area.

	Sq. Miles.
Anlagas,	ōwl-yah'gahs, 2,000
Baikal,	bi'kahl, 14,000
Constance,	kon'stance, 200
Demben,	dem'be-ā, 1,400
Erie,	e're, 7,800
Geneva,	je-ne'vā, 82
Great Bear,	great bear, 10,000
Great Salt,	great salt, 2,000
Great Slave,	great alaye, 12,000
Ilron,	hu'run, 20,400
Ladoga,	lā-dō'gā, 6,330
Michigan,	mlsh'e-gān, 23,000
Nicaragua,	nik-ar-ah'gwah, 4,000
Onega,	o-ne'gā, 3,900
Ontario,	on-tā-rō-o, 6,300
St. Clair,	saint klare, 350
Superior,	su-pe-ri-ur, 22,000
Tchad,	chahd, 19,000
Titicaca,	te-to-kah'kah, 3,000
Van,	vahn, 2,000
Vener,	va'ner, 2,120
Wetter,	wet'ter, 800
Winnipeg,	wīn-ne-peg, 6,500

Chief Rivers of the World.

	Length in Miles.
Alabama,	al-ā-bah'mā, 380
Albany,	awl'bā-ne, 340
Alleghany,	al'le-ga-ne, 400
Amazon,	am'ā-zon, 4,000
Amoo,	ah-moo', 1,800
Amoor,	ah-moor', 2,200
Angara,	ahng-gah-rah', 1,000
Araguay,	ahr-ah'gwī', 1,000
Arkansas,	ar-kan'sās, 2,000
Blue Nile,	blue nīle, 600
Brahmapootra,	brah-mā-poo'trā, 1,500
Brazoa,	brah'zoa, 950
Bug,	boog, 340
Cambodia,	kam-bo'de-ā, 1,800
Cape Fear,	kape fear, 300
Canca,	kōw'kāl, 550
Chatahoochee,	chat-tā-hoo'che, 600
Churchill,	church'il, 750
Clarke's,	klarks, 500
Coanza,	ko-ahn'zah, 500
Colorado (S. A.),	kol-o-rah'do, 800
Colorado (Tex.),	" 900
Colorado (of the West),	" 1,100
Columbia,	ko-lum'be-ā, 1,300
Congo,	kong'go, 1,200
Connecticut,	kou-nek'e-kut, 410
Coosa,	koo'sā, 350
Cumberland,	kum'ber-lānd, 600
Danube,	dān'ube, 1,725
Daivare,	del-ā-ware, 300
Des Moines,	de moīn, 400
Dniester,	ne'per, 1,230
Dniester,	nee'ster, 500
Dnepr,	1,000
Douro,	do'o-ro, 400
Drave,	drave, 360
Duck,	duck, 250
Duna,	dū'nā, 400
Dwina,	dwi'nā, 330
East Main,	east main, 400
Ebro,	e'bro, 340
Elbe,	elb, 550
Essequibo,	ea-se-ke'bo, 420
Enphrates,	u-fra'teez, 1,800
Flint,	flint, 300
Gambia,	gam'be-ā, 650
Ganges,	gan'jeez, 1,500
Garonne,	gah-roon', 384
Gila,	he'lāh, 450
Glommen,	glom'meu, 280
Godavery,	go-dah'ver-e, 700
Grand,	grand, 800
Great Kanawha,	kā-naw'wā, 400
Great Pedce,	pe-dee', 450
Green (Ky.),	green, 280
Guadalquivir,	gaw-dāl-kwiv'er, 280
Guadiana,	gaw-de-ān'ā, 380
Guaviare,	gaw-ve-ab'ra, 450
Hoang-Ho,	ho-ang'ho', 2,000
Hudson,	hud'sun, 300
Humboldt,	hūm'bolt, 350
Illinois,	il-le-noy', 400
Indigbirka,	in-de-ghir'kā, 750
Indus,	in'dus, 1,650
Iowa,	i-o-wā, 300
Irrawaddy,	ir-rā-wod'de, 1,200
Irish,	ir'tish, 1,700
Ishin,	ish-ēn', 700
James,	jamez, 450
Japura,	bah-poo'rah, 1,000
Javary,	hah-vā-re', 450
Kama,	kah'māh, 1,400
Kansas,	kan'sās, 1,300
Kaskaskia,	kas-kas'ke-ā, 300
Kennebec,	ken-ne-bek', 200
Kentucky,	ken-tuk'e, 300
Lena,	le'nā, 2,400

	Length in Miles.
Lewis,	low'is, 900
Loire,	lwahr, 530
Mackenzie's,	māk-ken'zees, 2,000
Madeira,	mah-da'rah, 2,000
Magdalena,	mag-da-le'nā, 900
Mamora,	mah-mo-ra', 600
Meinam,	me-nāhm', 800
Meta,	ma'tah, 500
Mezene,	mez-ane', 400
Minnesota,	min-ne-so'tā, 450
Mississippi,	mis-sis-sip'pe, 3,160
Missouri,	mis-soo're, 3,096
Murray,	mur're, 1,280
Nebraska,	ne-bras'kā, 1,200
Negro (Brazil),	na'gro, 1,200
Negro (Arg. Con.),	" 650
Nelson,	nel'sun, 200
Nense,	nense, 350
Niemen,	ne'men, 400
Niger,	ni'jer, 2,500
Nile,	nīle, 3,000
North Platte,	plat, 800
Noccea,	nwa'ces, 350
Obe,	o'be, 2,000
Ocmulgee,	ok-mul'ghe, 300
Oconee,	o-ko'ne, 280
Oder,	o'der, 800
Ohio,	o-hi'o, 950
Oka,	o'kā, 650
Olenek,	o-lā-nek', 800
Orange,	ōr'ānj, 1,000
Orinoco,	o-ro-no'ko, 1,600
Osage,	o-sage', 450
Ottawa,	ot-tā-wā, 450
Parana,	pah-rah-gwī', 1,600
Paraguay,	pah-rah-gwī', 2,000
Parana,	pah-rah-gwī', 2,000
Paranaíba,	pah-rah-gwī', 500
Paraná,	pah-rah-gwī', 750
Pearl,	pearl, 200
Penobscot,	pe-nob'skot, 275
Petchora,	petch'o-rā, 500
Pileomayo,	pīl-ko-mi'o, 1,000
Plata,	plat, 1,200
Potomac,	po-to-māk, 550
Pruthi,	prooth, 360
Purus,	poo'roos, 400
Putumayo,	poo-too-mi'o, 700
Red,	red, 1,200
Republican Fork of Kansas,	kan'sās, 500
Rhine,	rīne, 950
Rhone,	ronē, 534
Rio de la Plata,	re'o da lah plah'tah, 200
Rio Grande (N. A.),	re'o grahn'da, 2,000
Rio Grande (Brazil),	" 600
Rio Negro,	ro-ān-oko', 260
Rok,	rok, 320
Sah-been',	sah-been', 500
Sak-rā-men'to,	sak-rā-men'to, 400
Salado,	sah-lā'do, 1,000
San Francisco,	sān fran-sis'ko, 1,400
Sangamon,	sang'gā-mon, 200
Sao Joaquin,	sāhn ho-ah-keen', 350
Saskatchewan,	sas-katch'ā-waw, 1,900
Savannah,	sā-vā'nā, 450
Sene,	sane, 414
Senegal,	sen-e-gaw'l, 1,000
Severn (Eng.),	sev'ern, 210
Severn (N. A.),	" 250
Shannon,	shan'nun, 225
Smoky Hill Fork of Kansas,	kan'sās, 600
Songari,	son-gah-re', 800
South Platte,	plat, 600
Ssati fran'sis,	ssati fran'sis, 450
Ssati joz,	ssati joz, 450
Saint Lawrence,	saint law'rence, 770
Suriann,	soo-ri-nam', 300
Susquehanna,	sus-que-han'nā, 450
Tagua,	ta'gwa, 450
Talaposa,	tal-lā-poo'sā, 250
Tapajos,	tah-psh'zhoce, 500
Tennessee,	ten-nes-se', 1,200
Thames,	temz, 215
Thicis,	tice, 500
Tigris,	ti'grī, 1,150
Tobol,	to-bol', 500
Tocantins,	to-kahn-teens', 1,100
Tombybee,	tom-big'be, 500
Tomogookah,	toon-gook'kah, 1,500
Trinity,	trin'e-te, 550
Ucrayale,	oo-ki-ah'la, 500
Ural,	u'rāl, 1,800
Uruguay,	oo-roo-gwī', 800
Vermejo,	vehr-mā'ho, 750
Vistula,	vis'tu-lā, 530
Volga,	wol'gā, 2,000
Wabash,	wāv'bash, 550
Washita,	wosh'e-taw, 500
Weser,	wes'er, 38

STATISTICAL TABLES.

TABLE I.

SHOWING THE PRINCIPAL AGRICULTURAL STATISTICS OF THE UNITED STATES, ACCORDING TO THE CENSUS OF 1860.

STATES AND TERRITORIES.	PRODUCTS OF AGRICULTURE.														
	Acres of Improved Land.	Value of Live Stock.	Wheat, bushels of	Indian Corn, bushels of	Oats, bushels of	Rice, lbs. of	Tobacco, lbs. of	Cotton, bales of 400 lbs.	Wool, lbs. of	Butter, lbs. of	Hay, tons of	Cane Sugar, bbls. of 1,000 lbs.	Cane Molasses, gals. of	Sorghum Molasses, gals. of	Honey, lbs. of
Alabama.....	6,885,724	\$43,411,711	1,218,444	83,226,292	692,179	493,465	232,914	980,055	775,117	6,028,478	62,211	175	85,115	55,658	47,233
Arkansas.....	1,983,818	22,096,977	957,601	17,823,588	475,268	16,831	989,980	867,393	410,882	4,067,556	9,356			115,604	906,327
California.....	2,468,084	85,585,017	5,928,470	510,708	1,043,006	2,140	8,150		2,683,109	8,095,085	905,655			552	12,272
Connecticut.....	1,530,807	11,311,079	52,401	2,059,835	1,522,218		6,000,133		835,596	7,620,912	562,425			395	62,730
Delaware.....	637,065	3,144,706	912,941	8,592,387	1,016,910		9,099		50,201	1,430,502	36,973			1,613	66,187
Florida.....	654,213	5,533,356	2,808	2,894,891	46,599	223,704	828,815	65,153	50,171	408,855	11,478	1,669	436,857		115,520
Georgia.....	8,062,735	38,972,734	2,544,913	30,776,298	1,231,517	52,507,652	919,813	701,840	946,227	5,433,705	46,448	1,167	546,749	108,490	933,915
Illinois.....	13,099,374	72,501,225	23,897,023	115,174,777	15,220,029		6,885,262	1,482	1,980,507	28,052,551	1,774,554			806,580	1,846,808
Indiana.....	8,242,183	41,355,539	13,948,267	71,588,919	5,817,831		7,993,873		2,552,918	18,806,051	622,426			881,049	1,224,489
Iowa.....	8,792,792	22,175,028	8,440,403	42,410,636	5,887,645		303,168		660,558	11,533,666	818,179			1,211,512	917,877
Kansas.....	405,403	3,332,450	194,173	6,150,727	88,825		20,340	61	24,740	1,093,497	56,232			67,656	16,944
Kentucky.....	7,641,208	61,563,237	7,394,839	64,013,633	4,617,029		108,126,840		2,329,105	11,710,609	158,476			856,705	1,768,692
Louisiana.....	2,707,198	21,543,949	82,203	16,533,745	59,877	6,331,257	39,940	777,738	290,847	1,444,742	52,721	221,726	18,430,772		255,461
Maine.....	2,701,133	15,137,533	233,876	1,946,071	2,988,989		1,583		1,435,060	11,687,781	975,803			814,685	
Maryland.....	3,092,267	14,637,953	6,103,450	13,444,922	9,930,298		89,410,965		491,511	5,265,295	191,734			907	198,354
Massachusetts.....	2,153,512	12,737,714	110,733	2,157,063	1,180,075		8,239,193		877,267	8,297,596	665,851				49,125
Michigan.....	8,176,206	23,714,771	8,390,908	12,444,676	4,030,980	716	121,099		8,960,588	15,508,482	768,256			86,938	769,282
Minnesota.....	553,393	8,612,341	2,136,993	2,941,952	2,176,002	3,236	33,928		20,388	2,957,673	179,432			14,178	84,285
Mississippi.....	5,065,765	41,891,692	587,025	29,037,632	221,235	809,082	150,141	1,202,507	665,959	5,006,610	82,901	506	10,016	1,427	708,287
Missouri.....	6,243,871	53,693,673	4,237,536	72,892,157	3,680,570	9,767	25,096,196	41,188	2,069,778	12,704,837	401,070	402	22,805	796,111	1,565,958
New Hampshire.....	2,307,034	10,944,627	239,065	1,414,623	1,829,233		18,851		1,100,222	6,956,764	642,741				125,142
New Jersey.....	1,914,411	16,134,093	1,703,218	9,723,396	4,530,182		140,485		340,250	10,714,447	508,726			896	185,925
New York.....	14,853,493	103,553,296	8,651,105	20,061,049	83,175,131		5,764,582		9,454,474	108,097,290	3,564,738			516	2,869,751
North Carolina.....	6,517,231	31,130,935	4,773,705	89,073,564	2,751,860	7,999,976	32,850,250	145,514	683,473	4,785,495	181,805	88	12,494	268,475	2,055,969
Ohio.....	12,625,304	80,394,419	15,119,047	78,543,190	15,409,234		25,092,531		10,608,927	48,543,162	1,564,502			779,076	1,459,604
Oregon.....	804,414	5,016,255	826,776	76,122	885,673		405		219,012	1,000,157	27,986			815	821
Pennsylvania.....	10,463,296	60,572,726	13,042,165	23,106,821	27,887,147		8,161,583		4,752,522	58,553,511	2,945,418			22,749	1,402,128
Rhode Island.....	893,128	2,012,014	1,131	461,497	244,453		705		90,099	1,021,767	52,722			20	5,261
South Carolina.....	4,572,060	23,914,455	1,235,611	15,065,636	936,974	110,100,523	104,412	853,412	427,102	8,177,934	57,557	198		51,041	526,077
Tennessee.....	6,795,937	69,211,425	5,450,263	52,090,926	2,267,814	40,372	43,448,007	229,194	1,405,236	10,017,757	143,439	2	2,880	706,663	1,519,890
Texas.....	2,650,731	42,825,447	1,478,345	16,590,702	935,889	26,031	97,014	451,463	1,493,738	5,850,583	11,565	5,699	408,368	112,412	594,273
Vermont.....	2,233,157	16,241,930	437,077	1,625,411	8,630,267		12,245		8,113,956	15,900,359	940,178				212,150
Virginia.....	11,437,821	47,803,049	13,130,977	38,810,900	10,136,720	6,225	123,908,315	12,727	2,510,019	13,464,732	415,123			221,270	1,481,591
Wisconsin.....	8,746,167	17,997,375	15,657,458	7,517,900	11,050,260		87,240		1,011,933	13,611,928	853,037			19,854	207,294
Columbia, Dist. of.....	17,474	100,649	89,819	29,543	2,549		15,200		100	18,825	3,100			20	510
Dakota.....	2,115	89,116	945	29,269	2,549					2,170	855				
Nebraska.....	118,739	1,123,771	147,857	1,432,089	74,503		8,636		8,302	842,541	24,458			23,497	5,843
Nevada.....	14,132	177,638	8,631	460	1,082				890	7,700	2,218				
New Mexico.....	149,274	4,439,746	494,300	709,304	7,246		7,044	10	492,645	13,250	1,118			1,950	
Utah.....	77,219	1,516,707	384,892	90,432	63,211			186	74,765	216,046	10,235			25,475	
Washington.....	81,869	1,099,911	86,219	4,712	194,334		10		10,519	153,092	4,580				5,256
Total.....	163,110,720	\$1,039,329,915	173,104,921	593,792,740	172,643,185	157,167,03	434,209,461	5,818,792	60,294,913	450,651,572	10,080,596	230,982	14,963,996	6,749,123	23,366,857

TABLE II.

THE MONIES OF DIFFERENT COUNTRIES, WITH THEIR PAR VALUE IN FEDERAL CURRENCY.

Countries.	Monies.	Value in Federal Money.	Countries.	Money.	Value in Federal Money.
Great Britain.....	1 pound	\$ 4.84	Prussia.....	1 grosch	\$ cts. 1 02.3
" " " " " "	1 shilling	0 24.2	Switzerland.....	1 livre	0 27
" " " " " "	1 guinea*	5 00	" " " " " "	1 Geneva livre*	0 21
" " " " " "	1 crown*	1 12	Spain.....	1 doubloon	13 83
Dominion of Canada.....	1 pound	4 00	" " " " " "	1 pistole*	8 97
France.....	1 louis d'or*	4 55	" " " " " "	1 dollar	1 09
" " " " " "	1 gold napoleon	8 53	" " " " " "	1 real plate	0 10
" " " " " "	1 silver napoleon	0 98	" " " " " "	1 pistarene	0 13
" " " " " "	1 crown	1 06	" " " " " "	1000 pistarene	0 16
" " " " " "	1 franc	0 18.6	Portugal.....	1 half joe*	8 53
" " " " " "	1 sou	0 00.9	" " " " " "	1 milree	1 12
Belgium.....	1 franc	0 18.6	" " " " " "	1 cruzado	0 45
" " " " " "	1 gold leopard	4 65	Azores.....	1 milree	0 83.5
Germany.....	10 thaler piece	7 80	Sardinia.....	1 lira	0 18.6
" " " " " "	1 florin	0 40	Venice.....	1 lira	0 16
Saxony.....	1 august d'or	3 74.8	Scilly.....	1 ounce	2 40
" " " " " "	1 specie thaler	0 92	" " " " " "	1 tario	0 08
" " " " " "	1 rik dollar*	0 69	Tuscany.....	1 crown	1 05
" " " " " "	1 double george d'or	7 47.6	" " " " " "	1 pezza	0 90
Brannswick and Hanover.....	1 single george d'or	3 73.8	" " " " " "	1 soldo di pezza	0 45
" " " " " "	1 thaler	0 67	Rome.....	1 scudo piece	10 00
" " " " " "	1 grosch	0 02.8	" " " " " "	1 scudo or crown	1 00
Austria.....	1 thaler	0 97	" " " " " "	1 paolo	0 10
" " " " " "	1 florin	0 43.5	Naples.....	30 ducat piece	24 00
" " " " " "	1 zwanziger	0 16.1	Greece.....	1 drachme	0 16.8
Holland.....	10 florin piece	4 00	Turkey.....	1 piastre	0 05
" " " " " "	1 florin, or guilden	0 40	Malta.....	1 scond*	0 40
" " " " " "	1 Flemish pound	2 62.5	Mexico.....	1 doubloon	15 60
Hamburg and Lubeck.....	1 rik dollar	0 84	" " " " " "	1 dollar	1 00
" " " " " "	1 mare banco	0 85	Cuba.....	1 dollar	1 00
" " " " " "	1 mare current	0 28	" " " " " "	1 real	0 12.5
Bremen.....	1 rik dollar	0 78.75	" " " " " "	1 dollar	0 33.33
" " " " " "	36 groat piece	0 89.37	St. Domingo.....		
Denmark.....	1 specie dollar	1 05	U.S. Colombia.....		
" " " " " "	1 rik dollar	0 52.5	Ecuador, Chilli, Peru	1 dollar	1 00
" " " " " "	1 mare	0 08.75	Buenos Ayres.....	1 dollar	0 93
Sweden.....	1 rik dollar	1 05	Brazil.....	1 moldore*	4 80
Norway.....	1 specie dollar	1 06	" " " " " "	1 milree	0 82.5
" " " " " "	1 mare	0 21	" " " " " "	silver coin (1200 rees)	0 99.4
Russia.....	1 imperial*	7 83	China.....	1 tael	1 43
" " " " " "	1 ruble	0 75	" " " " " "	1 mace	0 14.8
Prussia.....	1 gold frederick	8 91	Japan.....	1 tael	0 75
" " " " " "	1 thaler	0 69	" " " " " "	1 mace	0 07.5
" " " " " "	1 florin	0 22.75	Cape Good Hope.....	1 rik dollar	0 31.3

* Value established by Custom-House regulation and commercial usage.

TABLE III.

SHOWING THE POPULATION OF SOME OF THE MOST IMPORTANT CITIES, —THOSE IN THE UNITED STATES, ACCORDING TO THE CENSUS OF 1860.

Aberdeen.....	73,794	Glasgow.....	432,265	NEW HAVEN.....	39,267
Adrianople.....	140,000	HABOE.....	87,319	New Orleans.....	168,675
ALBANY.....	62,267	HALIFAX.....	36,000	New York.....	873,669
Alexandria.....	89,000	HAMBURG (1867).....	223,763	Ningpo.....	250,000
Allegany.....	28,702	HANGCHOW.....	500,000	Odessa.....	118,970
Amsterdam.....	262,691	HARTFORD.....	29,152	Oporto.....	86,257
Antwerp.....	122,665	HAVANA.....	134,215	Palermo.....	167,625
Baltimore.....	212,418	HAVRE.....	74,336	PARIS.....	1,696,141
BANOKOK.....	409,000	HULL.....	93,994	Patna.....	284,132
Barcelona.....	189,948	HYDERABAD.....	200,000	PERIN.....	1,800,000
BATAVIA.....	118,300	ISPANH.....	150,000	Pesth.....	131,705
Belfast, Ire.....	119,212	JEDO.....	1,500,000	Philadelphia.....	665,529
Benares.....	500,000	Jersey City.....	29,226	Pittsburgh.....	49,217
BERLIN (1867).....	702,437	King-tse-chiang.....	1,000,000	Portland, Me.....	26,342
Birmingham.....	335,793	Konigsberg.....	101,507	Portsmouth, Eng.....	94,546
Bombay.....	500,000	Lahore.....	120,000	Prague.....	142,588
Bordeaux.....	162,750	La Puebla.....	70,600	PROVIDENCE.....	50,666
BOSTON.....	177,840	Leeds.....	228,187	Quebec.....	51,100
Bremen.....	70,692	Leghorn.....	83,543	RICHMOND.....	37,910
Breslau (1867).....	181,273	Leipsic (1867).....	91,698	Rochester.....	48,204
Bristol.....	163,680	Liege.....	102,888	ROME.....	210,701
Brooklyn.....	266,661	Lille.....	121,827	Rotterdam.....	115,354
BRUSSELS.....	187,155	Lisbon.....	224,063	Rouen.....	102,619
Buffalo.....	85,501	Liverpool.....	484,337	Roxbury.....	25,137
Cadiz.....	71,521	LONDON.....	3,067,536	Salem.....	22,252
CAIRO.....	250,000	Louisville.....	68,023	San Francisco.....	56,823
CALCUTTA.....	413,000	Lowell.....	36,827	Savannah.....	22,292
Cambridge, Mass.....	26,060	Lucknow.....	200,000	Seville.....	118,298
Canton.....	1,000,000	Lyons.....	318,803	Shanghai.....	190,000
Cashmere.....	200,000	Madras.....	720,000	Sheffield.....	185,157
Changchow.....	1,000,000	MADRID.....	298,426	Smyrna.....	150,000
Charleston.....	40,522	Manchester.....	258,855	Soochow.....	700,000
Charlestown.....	25,063	MANDELAY.....	300,000	St. Louis.....	160,773
Chicago.....	110,973	MANILA.....	140,000	STOCKHOLM.....	131,361
Cincinnati.....	171,000	Marselles.....	260,910	ST. PETERSBURG.....	546,000
Cleveland.....	43,117	MELBOURNE.....	108,224	Strasbourg.....	82,011
Cologne (1867).....	119,516	Memphis.....	22,623	Sumt.....	157,000
CONSTANTINOPLE.....	715,000	MEXICO.....	205,000	SYDNEY.....	100,000
COPENHAGEN.....	153,148	Miaco.....	500,000	Syracuse, N. Y.....	28,119
Cork.....	78,892	Milan.....	196,109	Tientsin.....	700,000
Dacca.....	209,000	Milwaukee.....	45,246	Toulon.....	84,987
Danasscus.....	112,000	Mobilo.....	29,258	Toulouse.....	113,229
Dantzic (1867).....	87,506	Montreal.....	93,323	Troy.....	39,325
Delhi.....	250,000	MOROCCO.....	100,000	TUNIS.....	130,000
Detroit.....	45,619	Moscow.....	351,627	Turin.....	180,590
Dresden (1867).....	153,971	MUNICH (1867).....	170,000	Utica.....	22,529
DUBLIN.....	318,437	Nagpoor.....	115,000	Valencia.....	107,703
Dundee.....	90,425	Nanchang.....	360,000	Venice.....	118,172
EDINBURGH.....	175,128	Nankin.....	400,000	VIENNA.....	678,525
FLORENCE.....	114,363	Nantes.....	113,625	Warsaw.....	162,805
FLOWCHOW.....	500,000	Naples.....	418,968	WASHINGTON.....	61,122
Genoa.....	127,386	Newark.....	71,941	Wilmington, Del.....	21,258
Ghent.....	124,441	Newcastle.....	109,291	Worcester.....	24,992



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